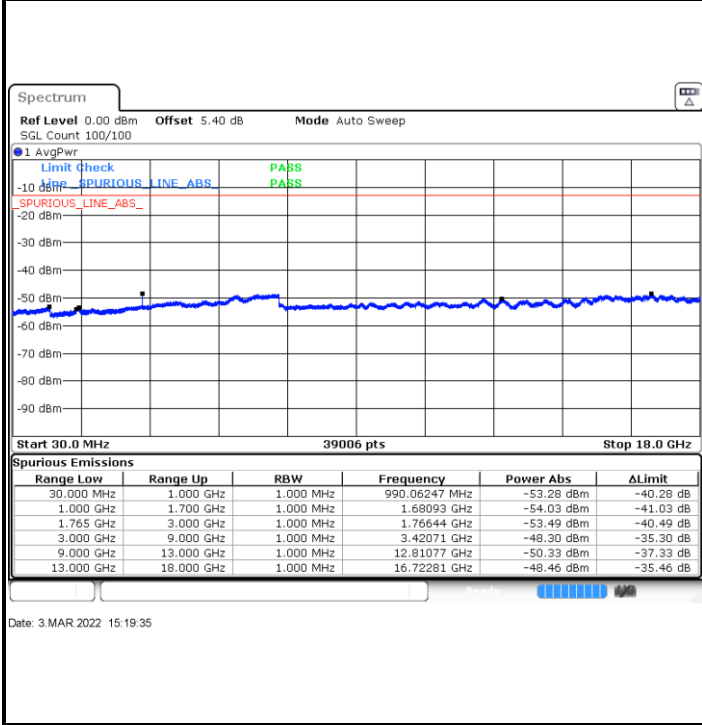


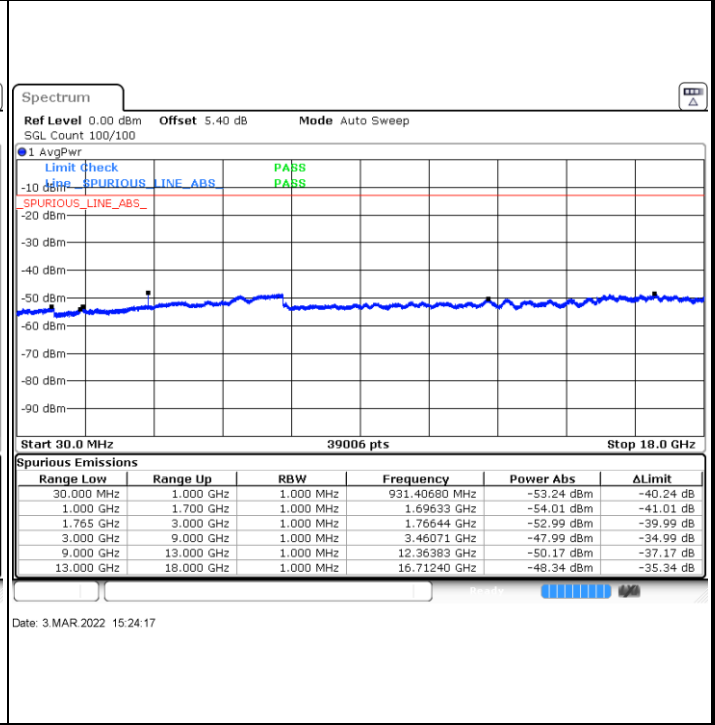


LTE Band 4 / 5MHz

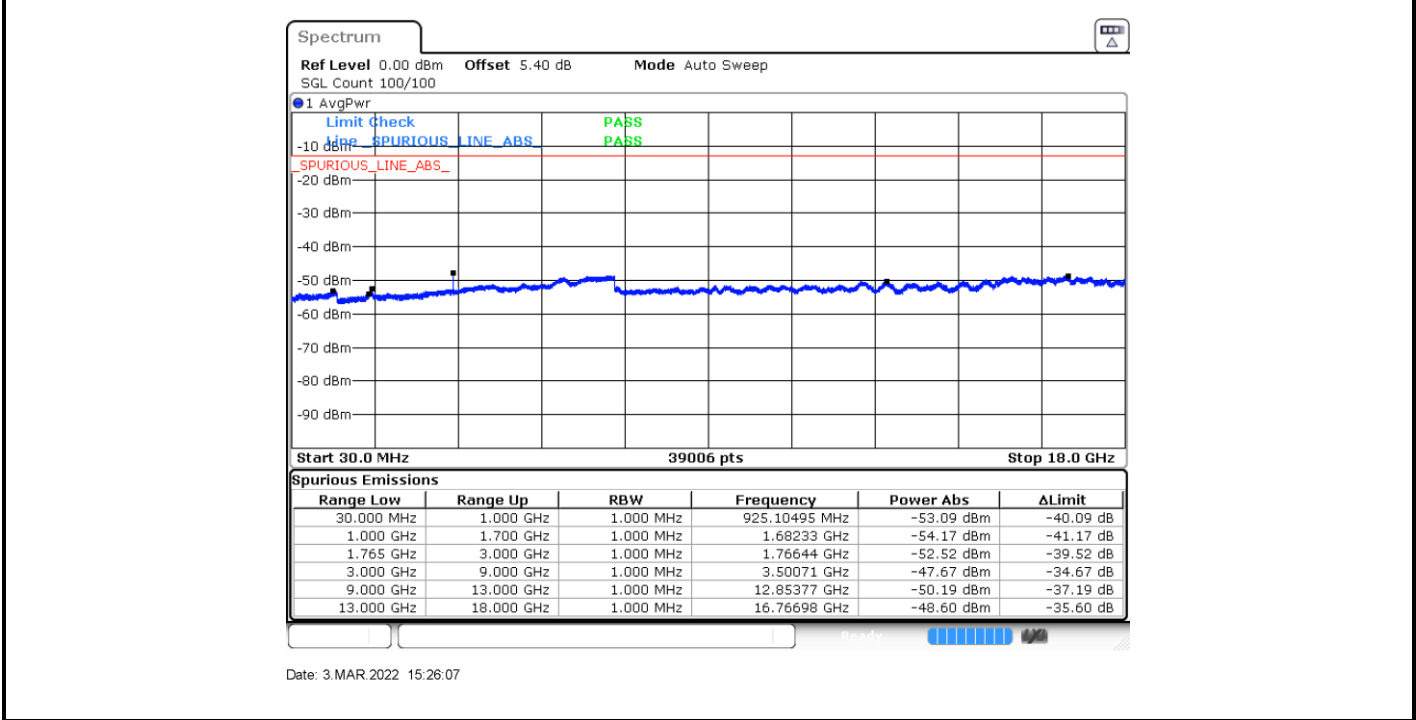
Lowest Channel / QPSK



Middle Channel / QPSK



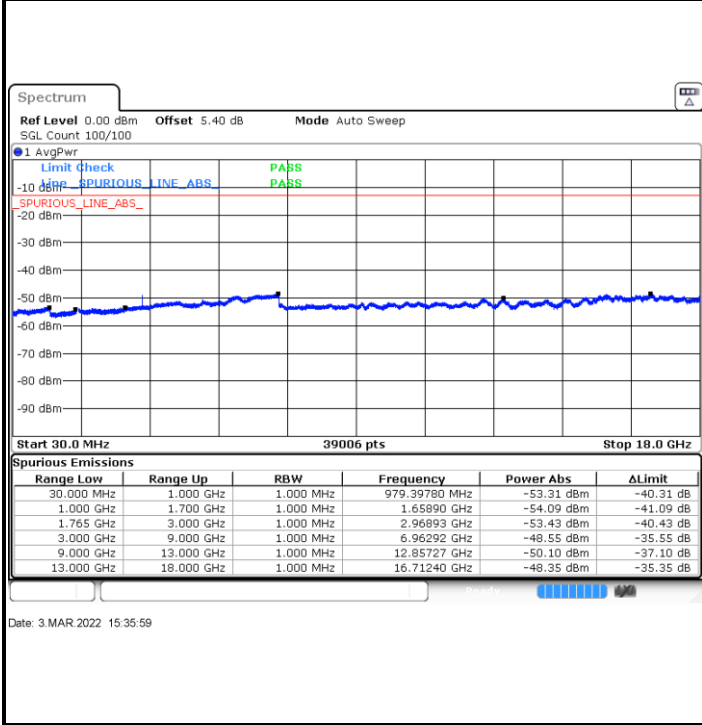
Highest Channel / QPSK



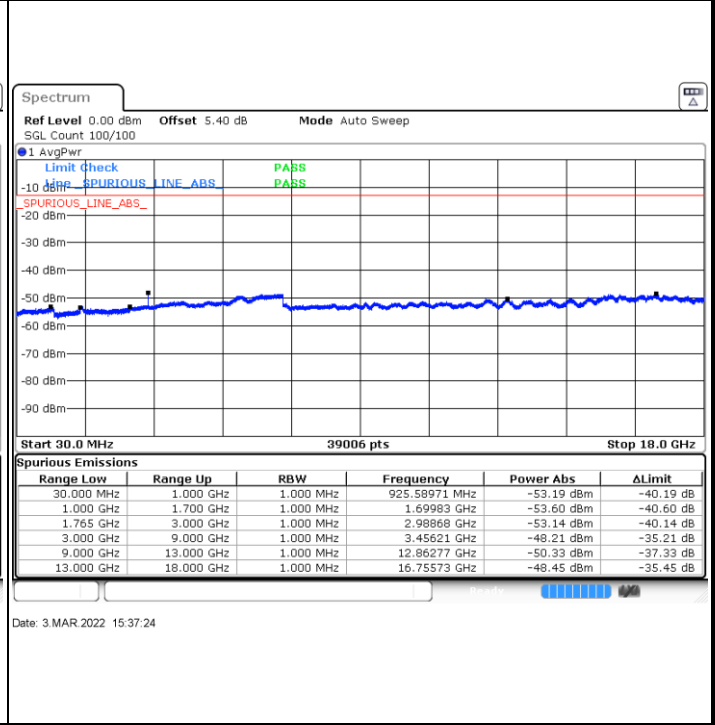


LTE Band 4 / 10MHz

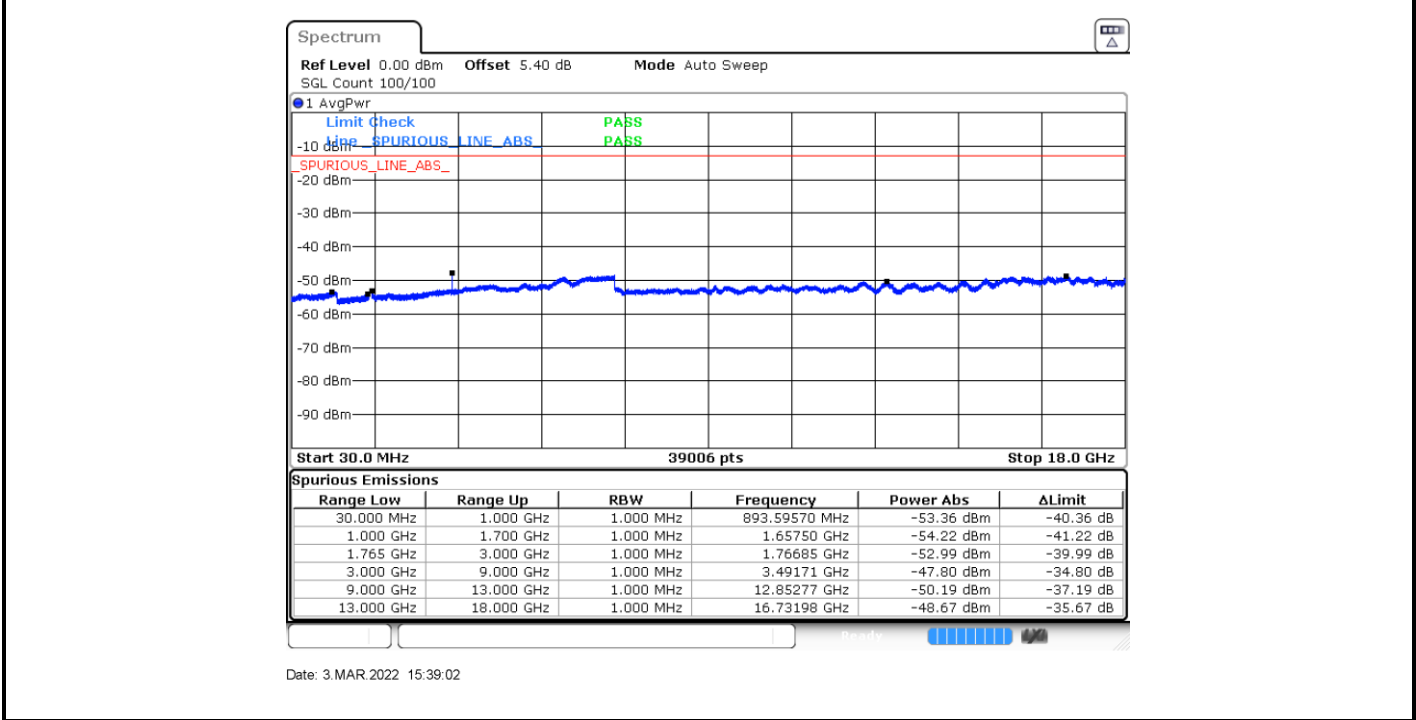
Lowest Channel / QPSK



Middle Channel / QPSK



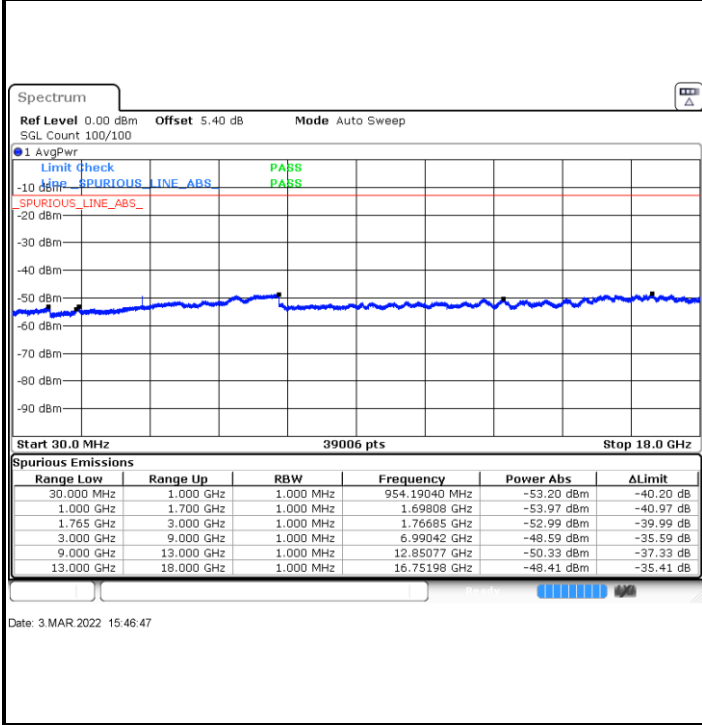
Highest Channel / QPSK



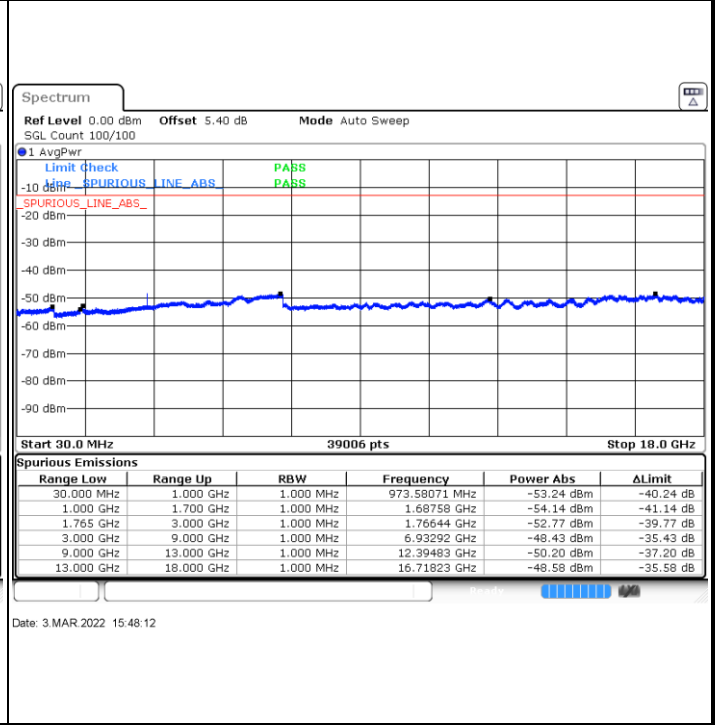


LTE Band 4 / 15MHz

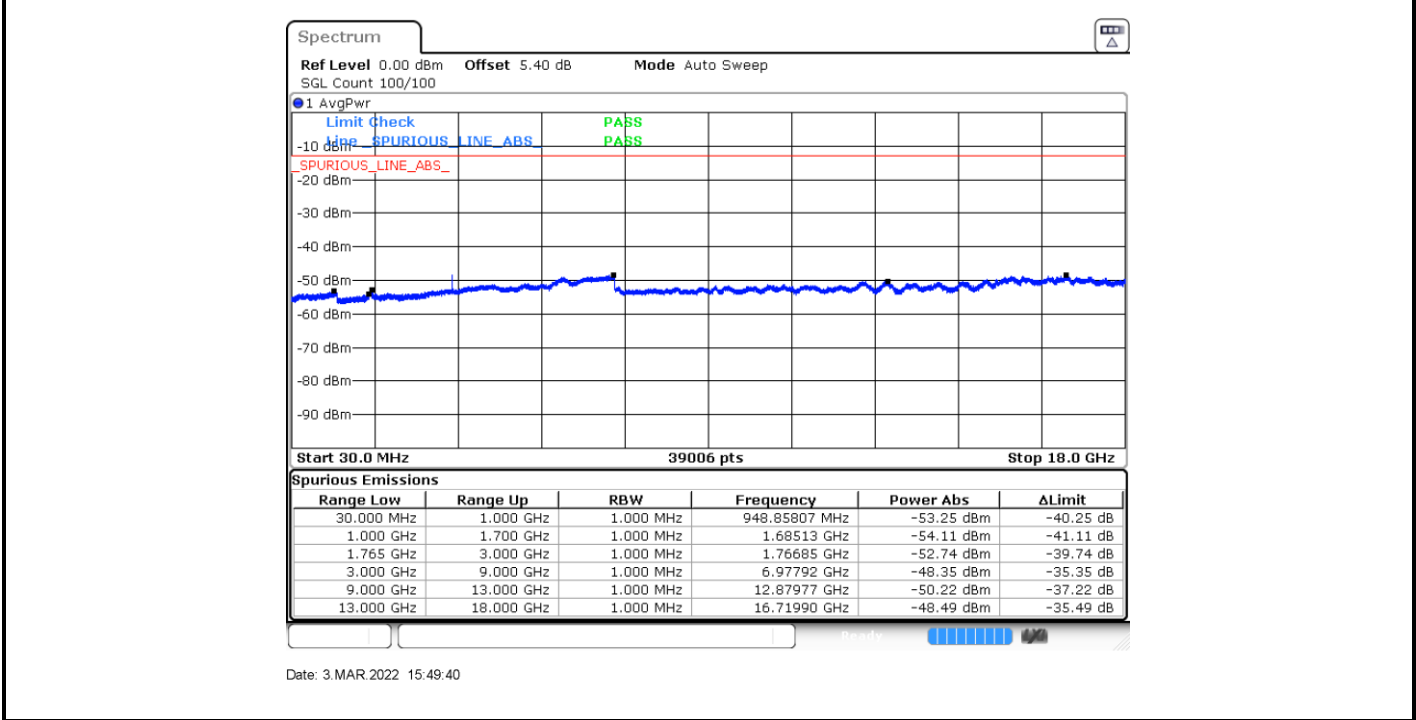
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

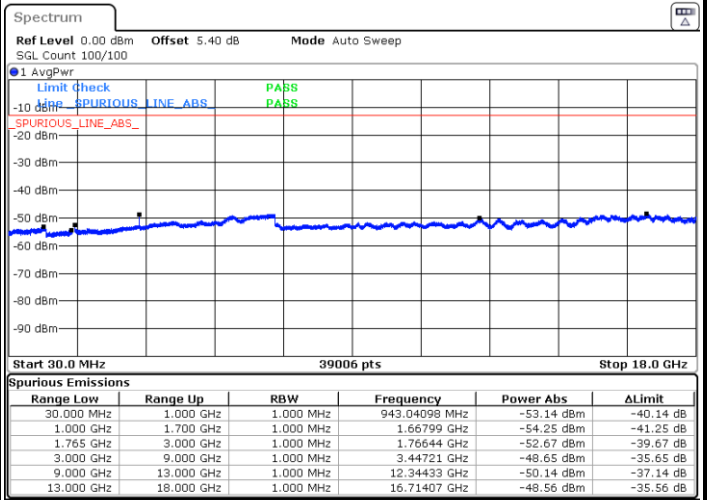
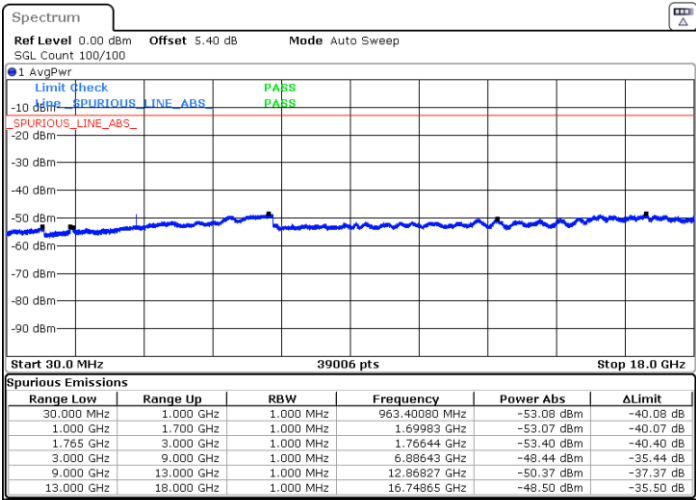




LTE Band 4 / 20MHz

Lowest Channel / QPSK

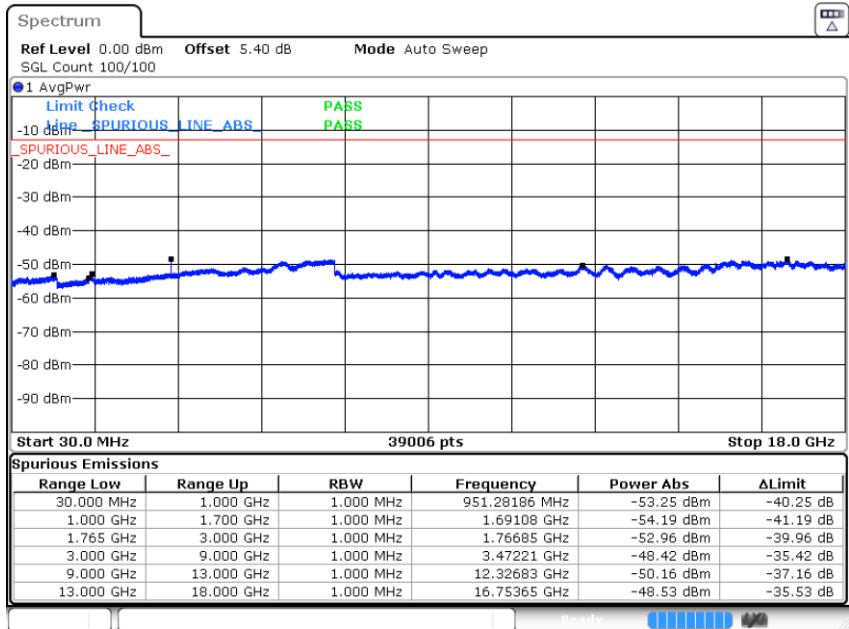
Middle Channel / QPSK



Date: 3.MAR.2022 15:56:39

Date: 3.MAR.2022 15:58:05

Highest Channel / QPSK



Date: 3.MAR.2022 15:59:33



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0084	
20	Battery End Point	0.0003	

Note:

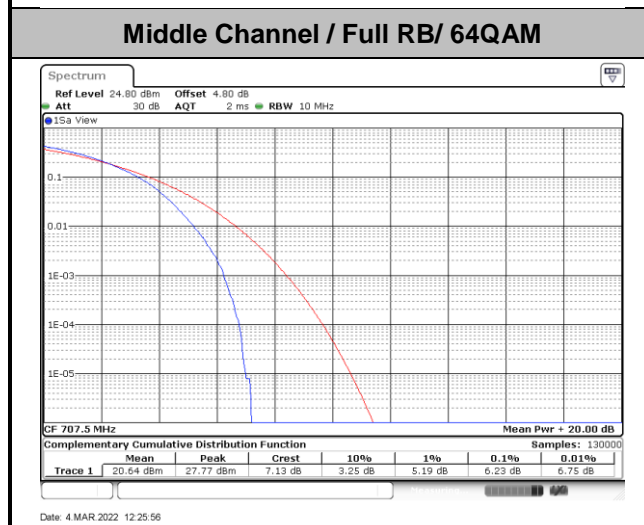
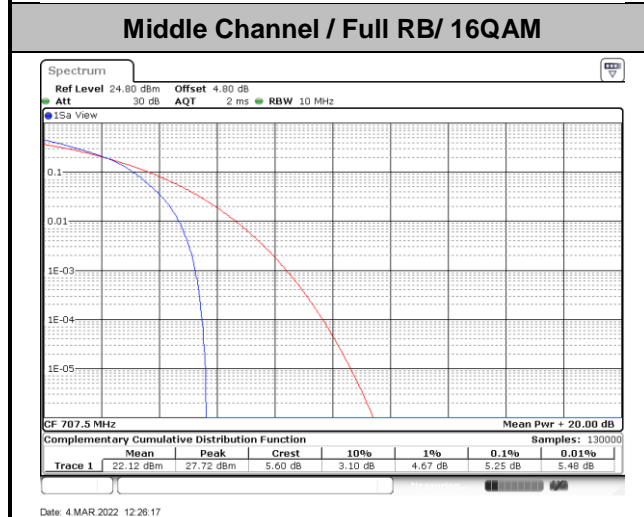
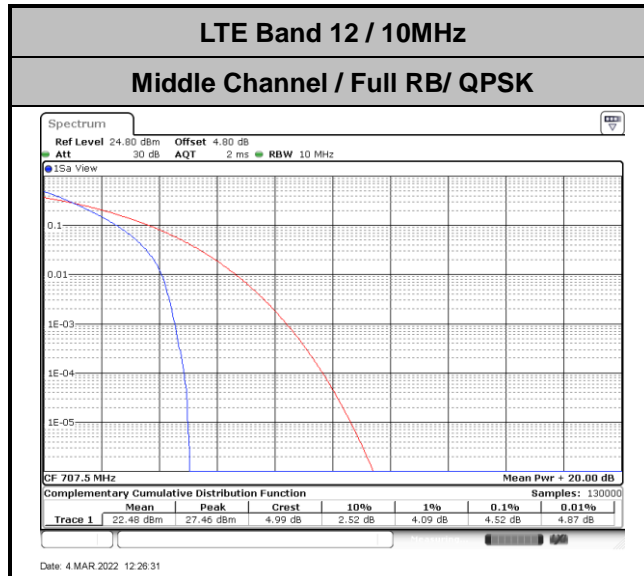
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

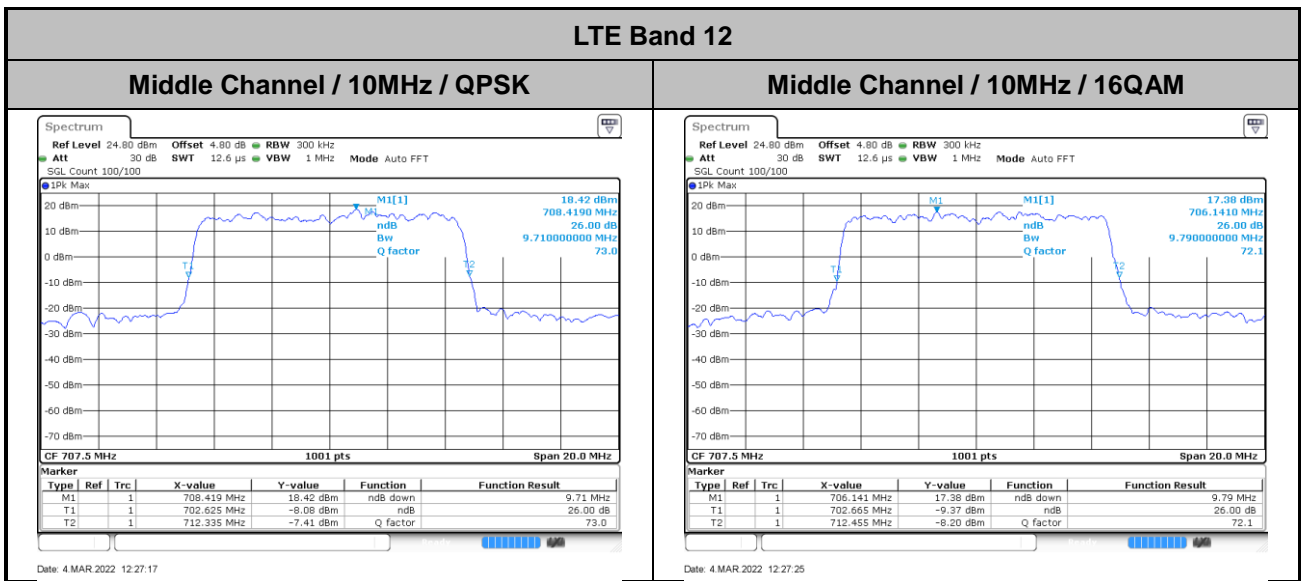
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.52	5.25	6.23	PASS





26dB Bandwidth

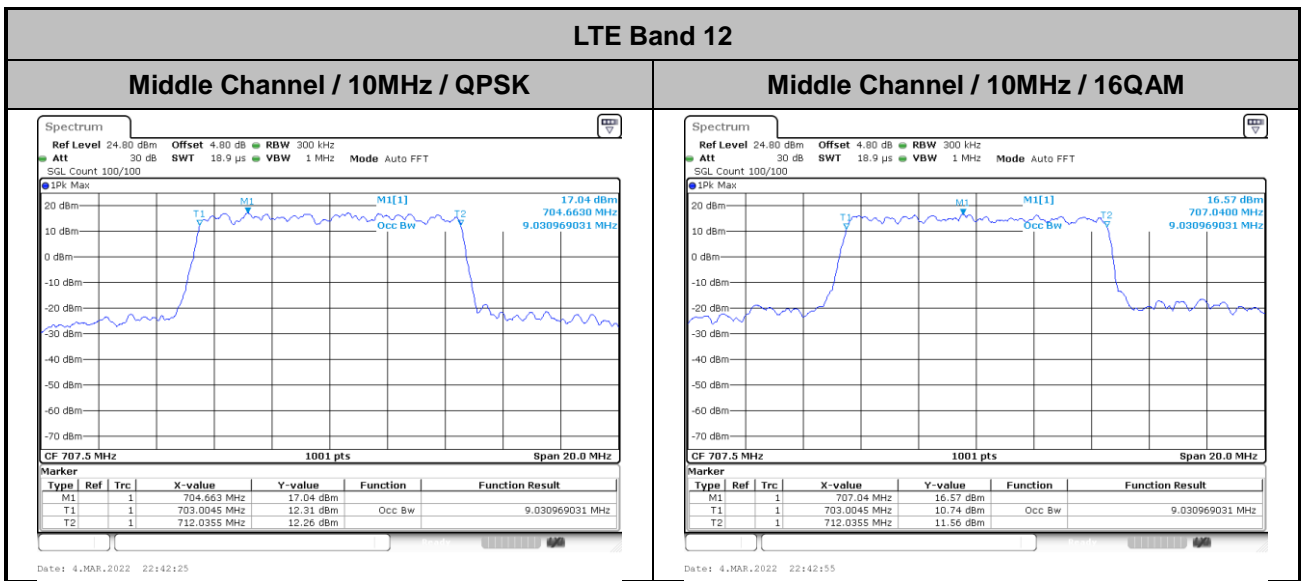
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.71	9.79





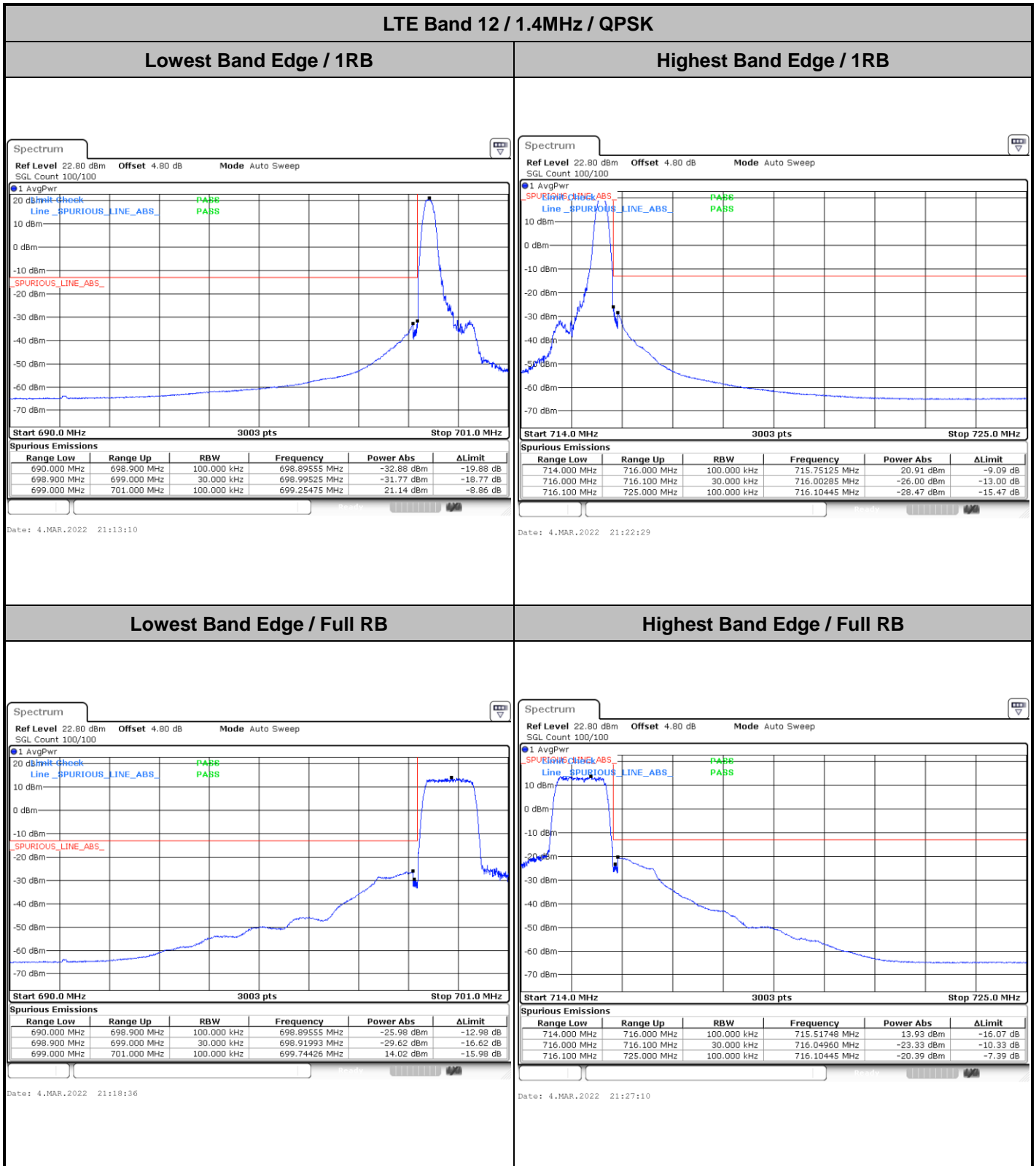
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.03





Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



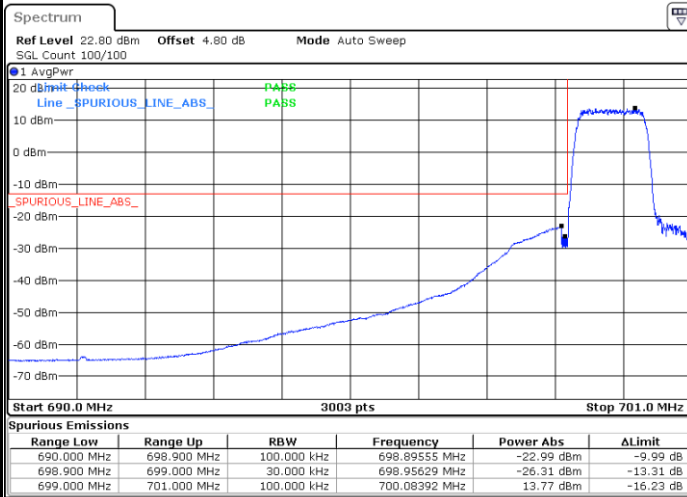
Date: 4.MAR.2022 21:14:24

Highest Band Edge / 1 RB



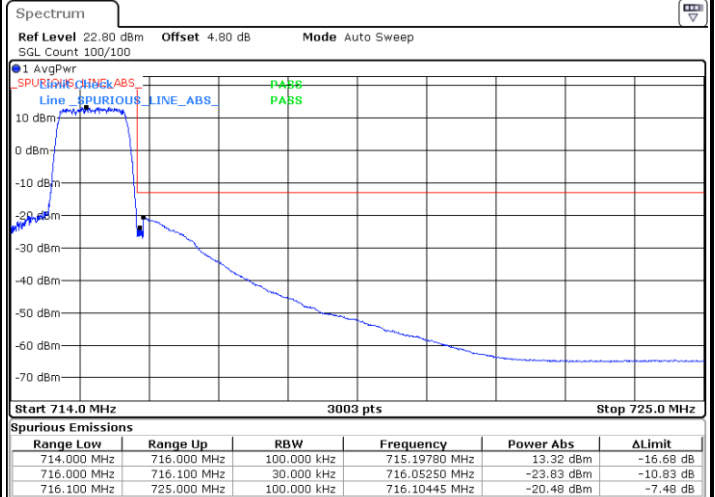
Date: 4.MAR.2022 21:23:19

Lowest Band Edge / Full RB



Date: 4.MAR.2022 21:17:51

Highest Band Edge / Full RB

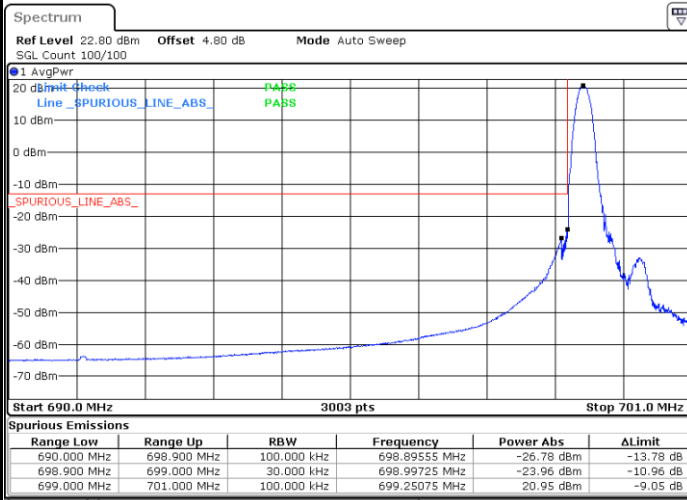


Date: 4.MAR.2022 21:25:59



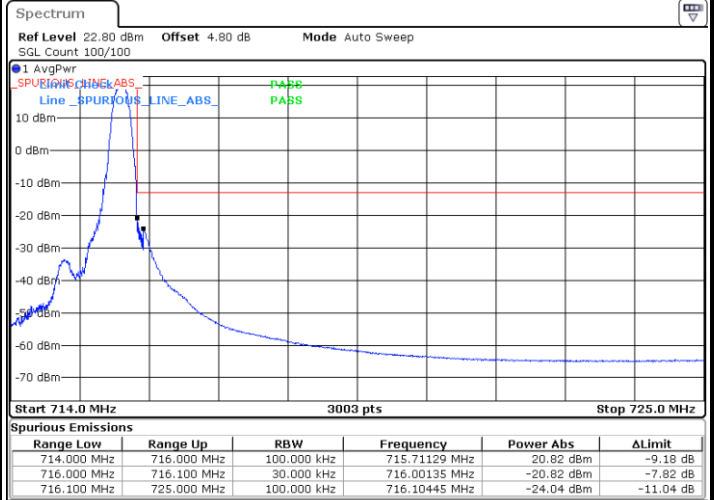
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



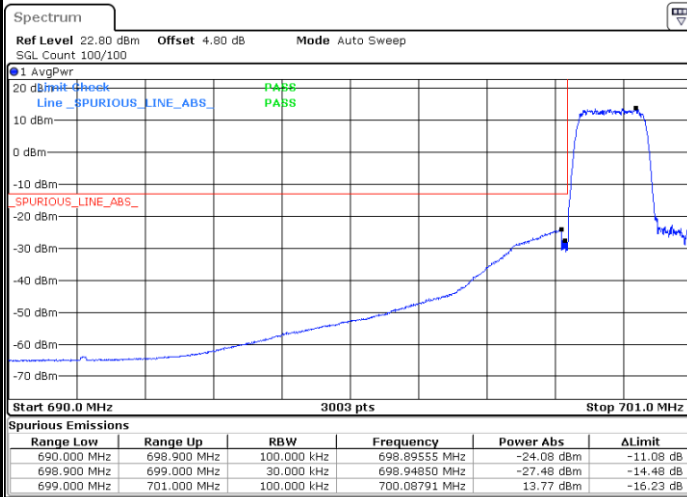
Date: 4.MAR.2022 21:15:26

Highest Band Edge / 1 RB



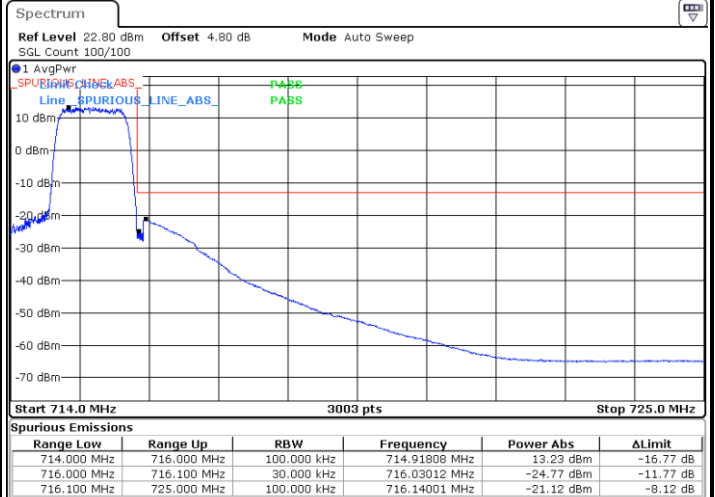
Date: 4.MAR.2022 21:24:10

Lowest Band Edge / Full RB



Date: 4.MAR.2022 21:16:48

Highest Band Edge / Full RB

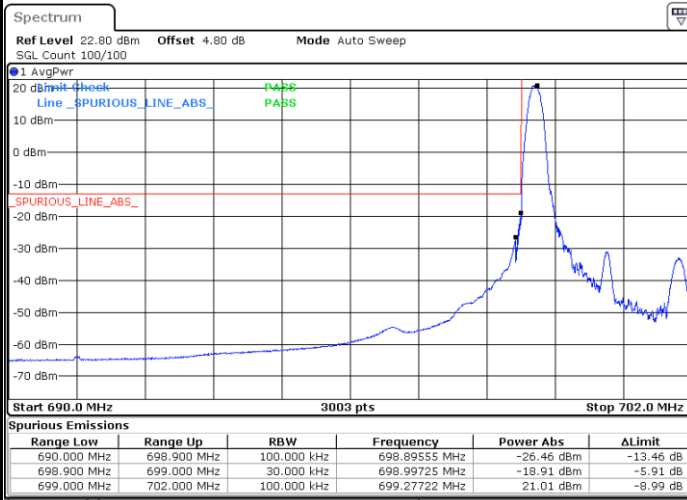


Date: 4.MAR.2022 21:25:07

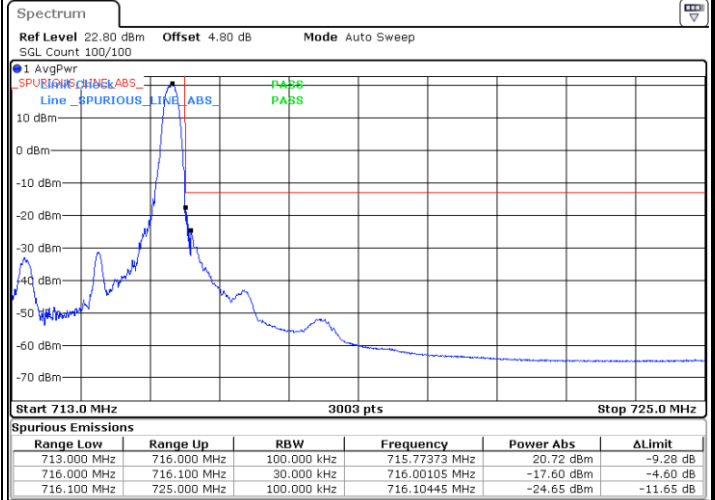


LTE Band 12 / 3MHz / QPSK

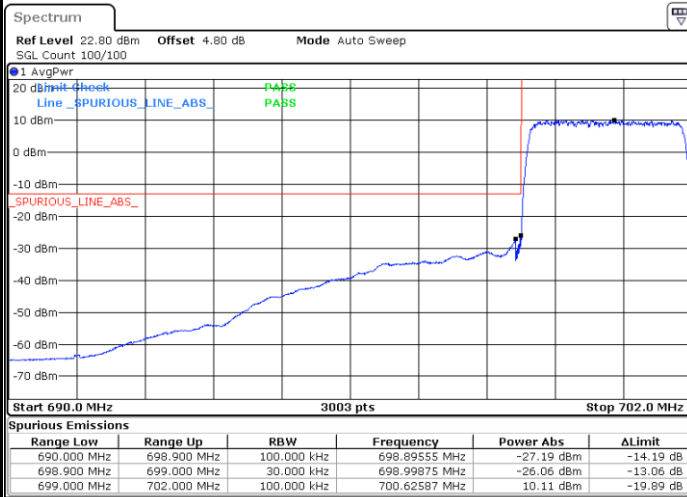
Lowest Band Edge / 1RB



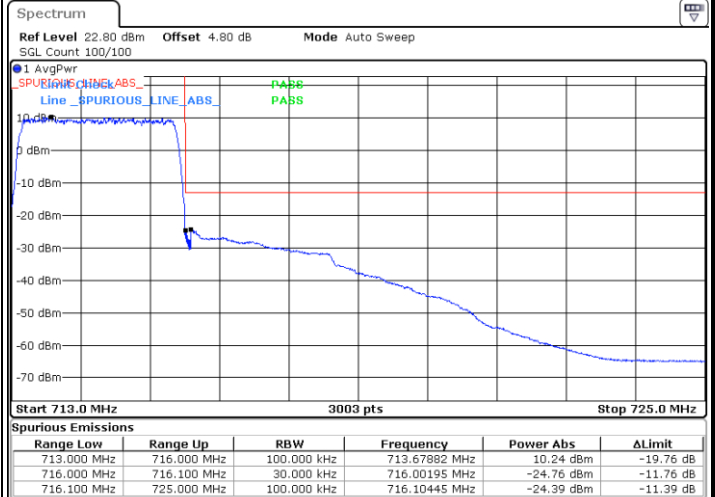
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



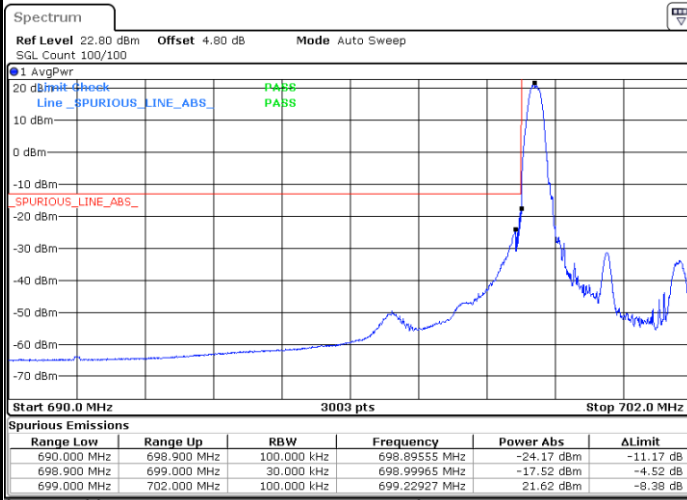
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



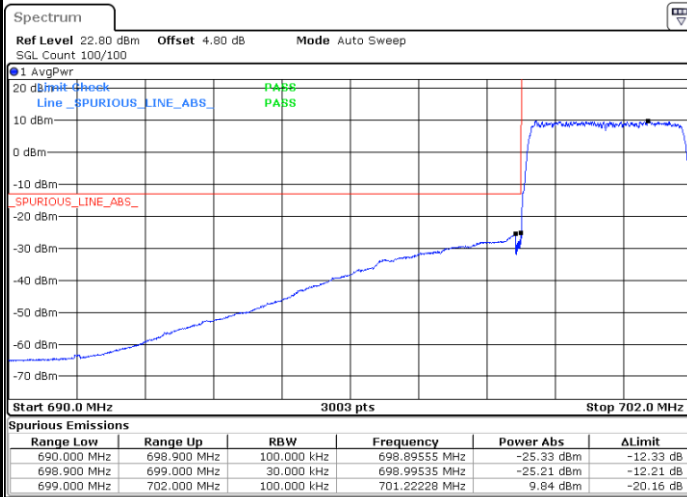
Date: 4.MAR.2022 21:48:38

Highest Band Edge / 1 RB



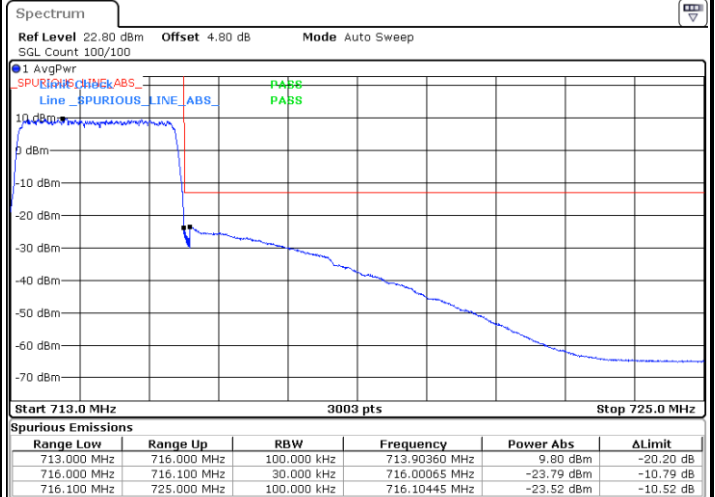
Date: 4.MAR.2022 21:57:36

Lowest Band Edge / Full RB



Date: 4.MAR.2022 21:51:57

Highest Band Edge / Full RB

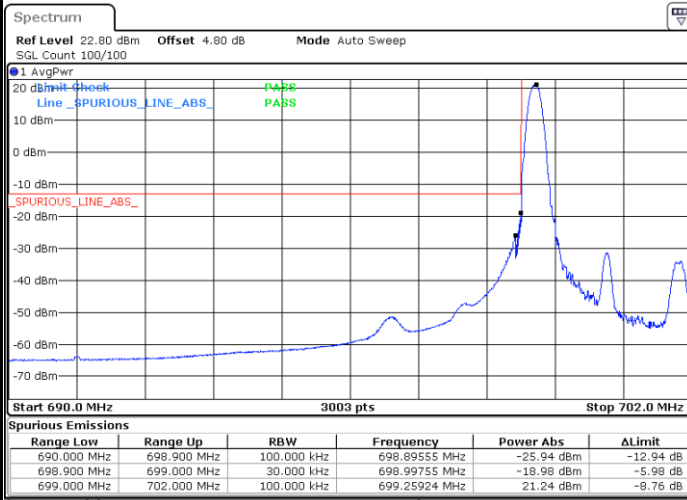


Date: 4.MAR.2022 22:00:20



LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



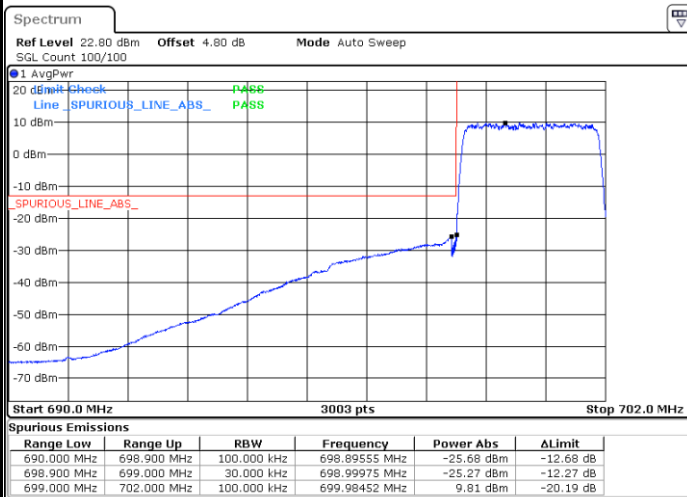
Date: 4.MAR.2022 21:49:43

Highest Band Edge / 1 RB



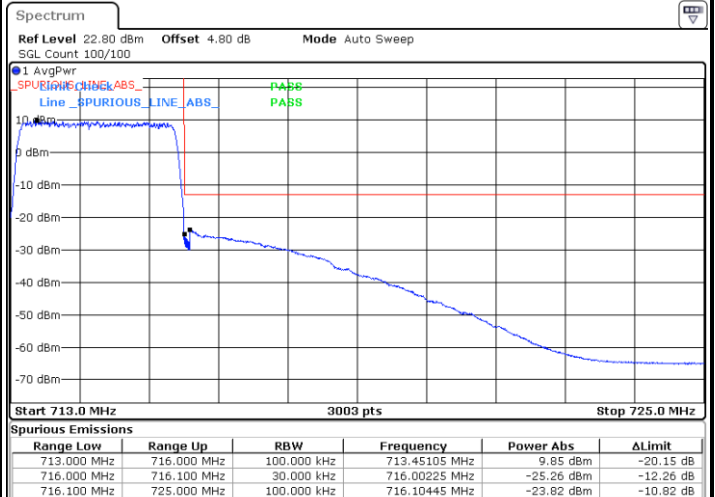
Date: 4.MAR.2022 21:58:29

Lowest Band Edge / Full RB



Date: 4.MAR.2022 21:51:05

Highest Band Edge / Full RB

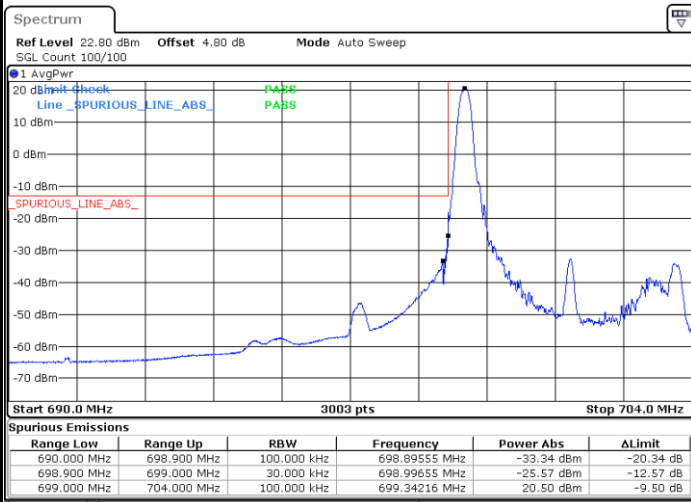


Date: 4.MAR.2022 21:59:30

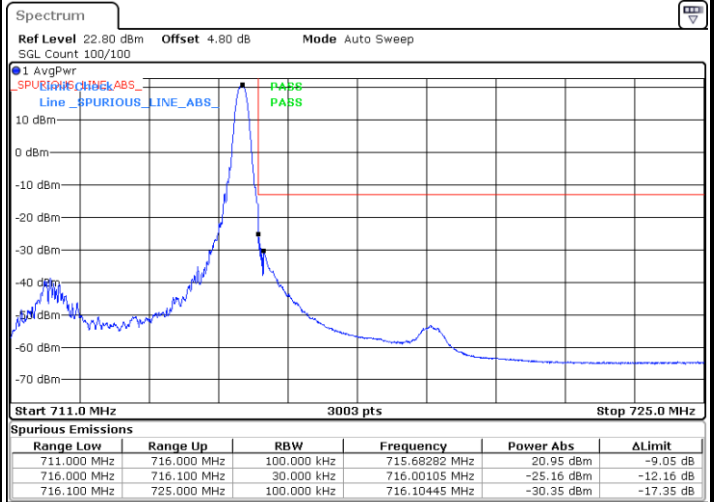


LTE Band 12 / 5MHz / QPSK

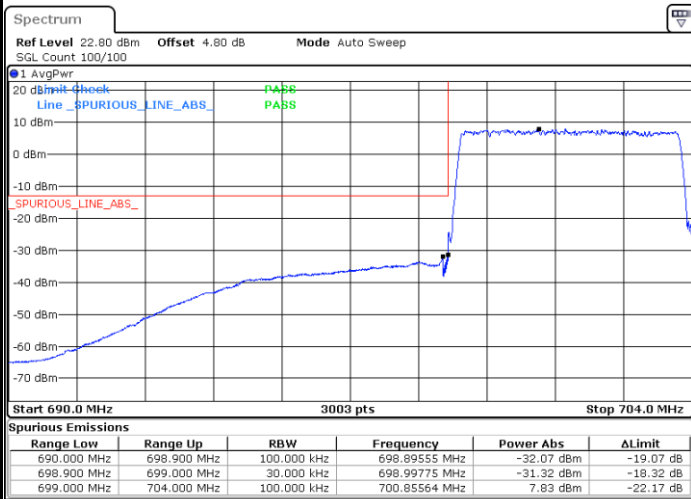
Lowest Band Edge / 1 RB



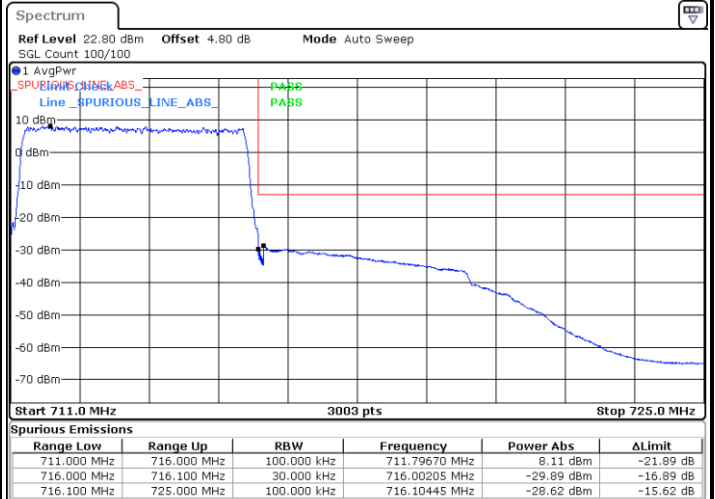
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



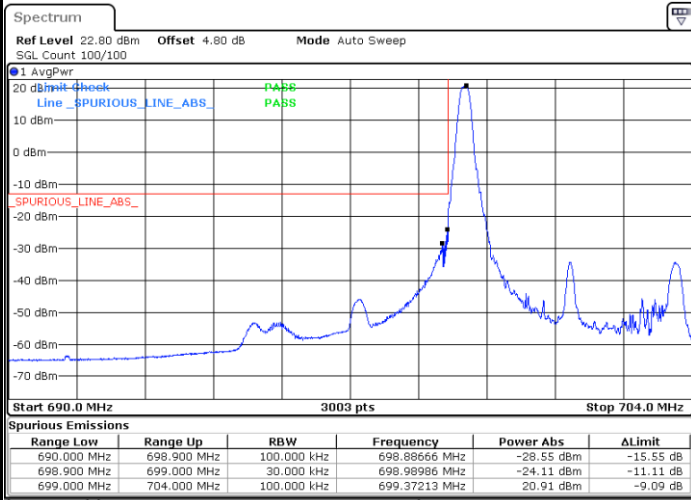
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



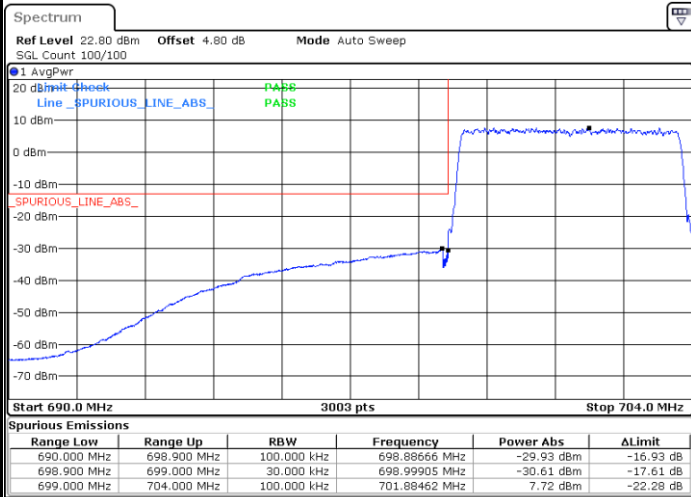
Date: 4.MAR.2022 22:08:59

Highest Band Edge / 1 RB



Date: 4.MAR.2022 22:18:08

Lowest Band Edge / Full RB



Date: 4.MAR.2022 22:12:33

Highest Band Edge / Full RB

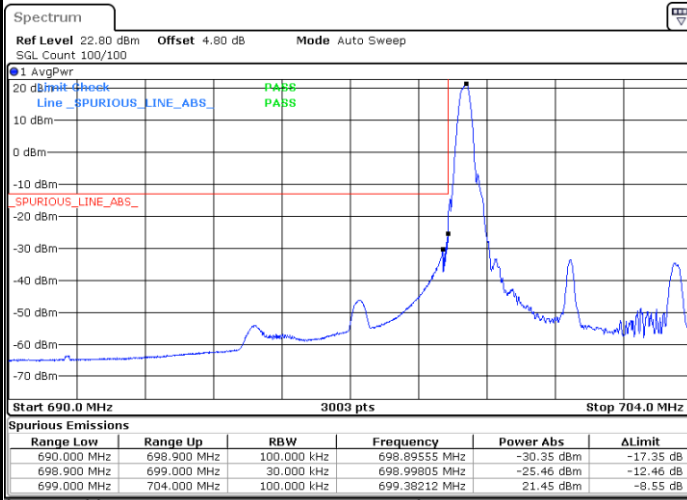


Date: 4.MAR.2022 22:24:43



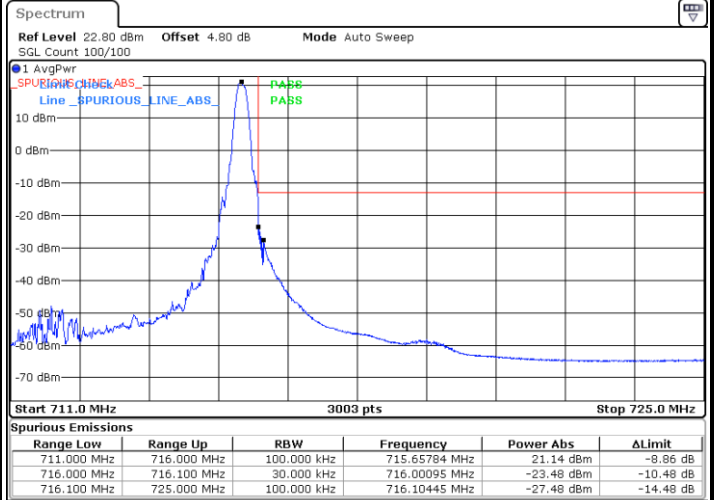
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



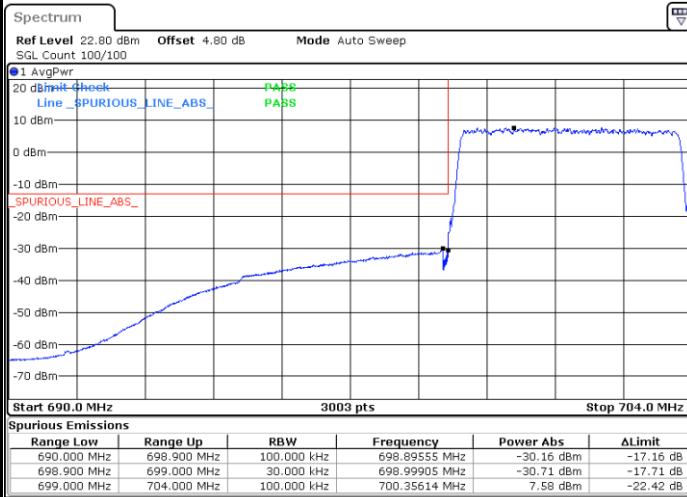
Date: 4.MAR.2022 22:10:17

Highest Band Edge / 1 RB



Date: 4.MAR.2022 22:22:55

Lowest Band Edge / Full RB



Date: 4.MAR.2022 22:11:39

Highest Band Edge / Full RB

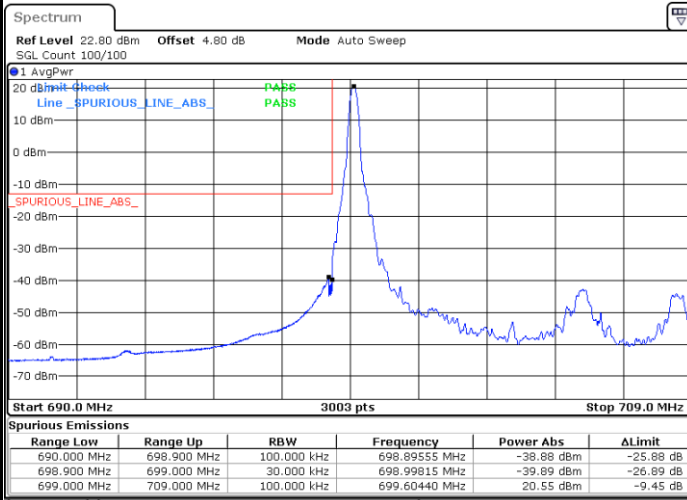


Date: 4.MAR.2022 22:23:55



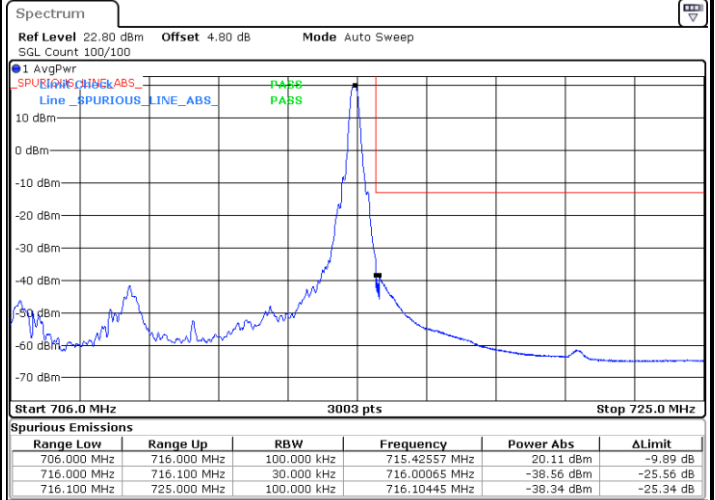
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



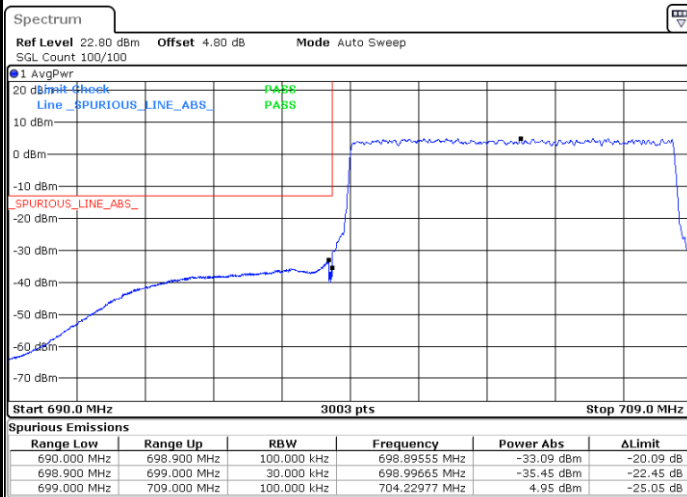
Date: 4.MAR.2022 22:36:21

Highest Band Edge / 1 RB



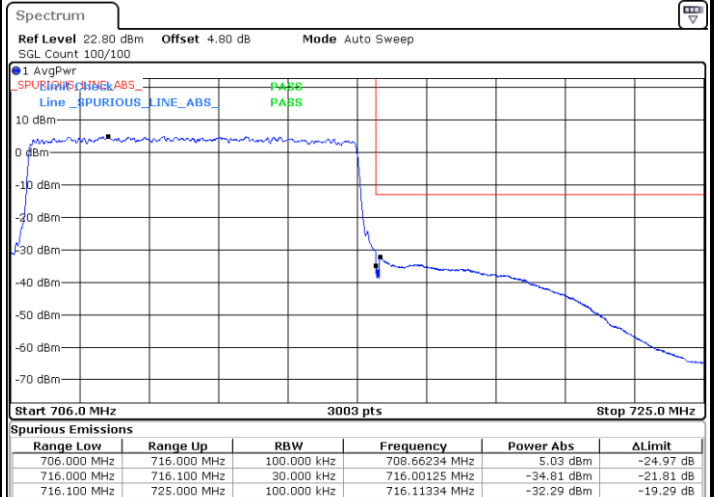
Date: 4.MAR.2022 22:48:49

Lowest Band Edge / Full RB



Date: 4.MAR.2022 22:40:47

Highest Band Edge / Full RB

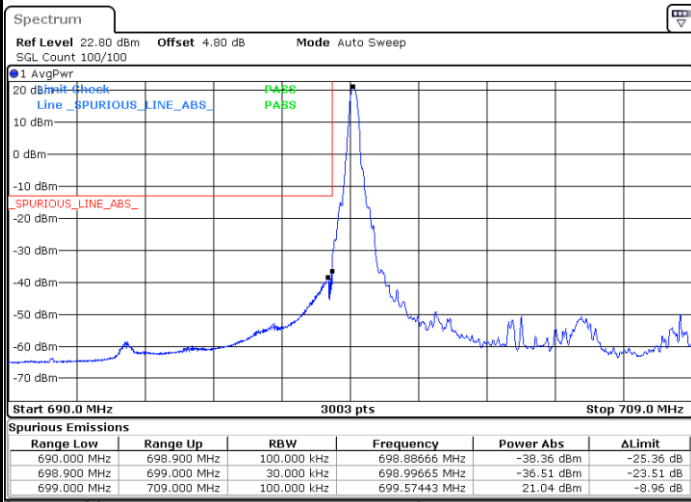


Date: 4.MAR.2022 22:54:45



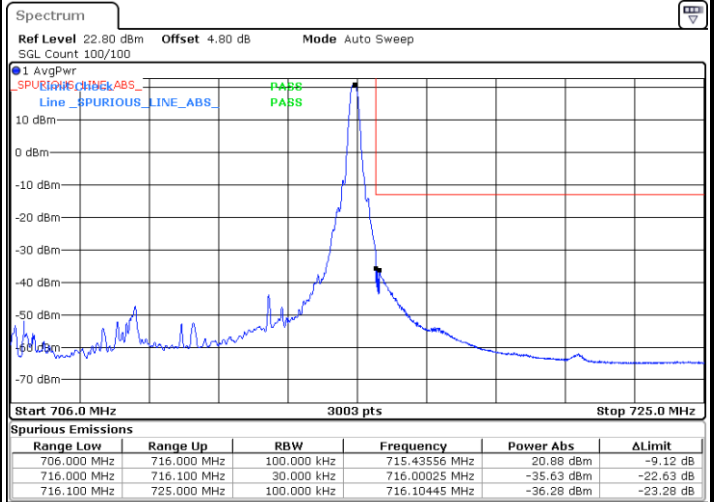
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



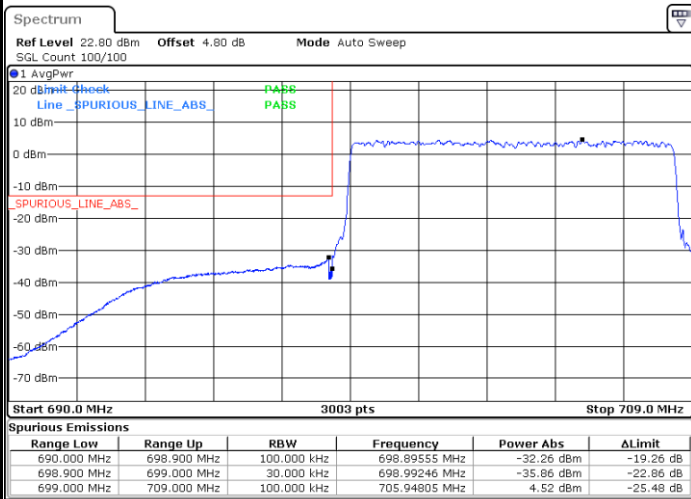
Date: 4.MAR.2022 22:37:24

Highest Band Edge / 1 RB



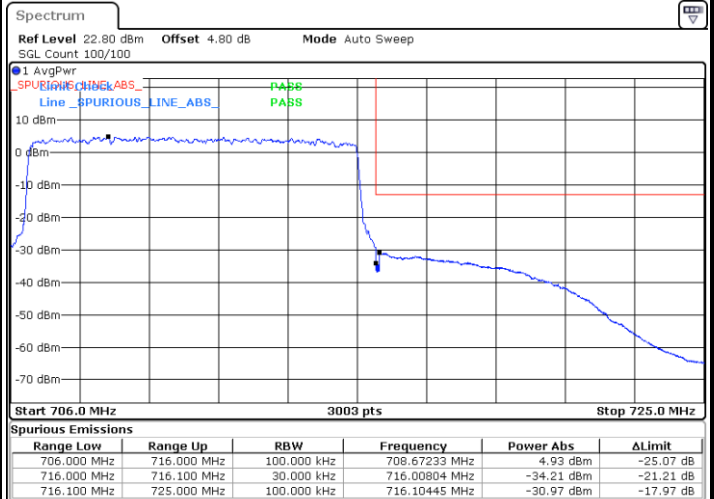
Date: 4.MAR.2022 22:49:39

Lowest Band Edge / Full RB



Date: 4.MAR.2022 22:40:01

Highest Band Edge / Full RB

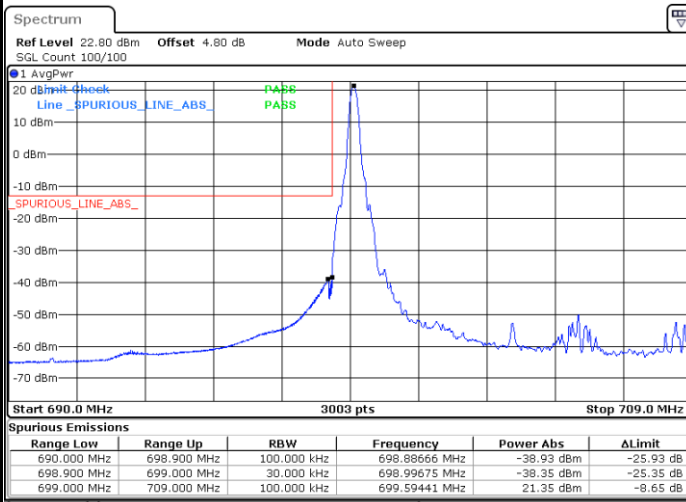


Date: 4.MAR.2022 22:52:35



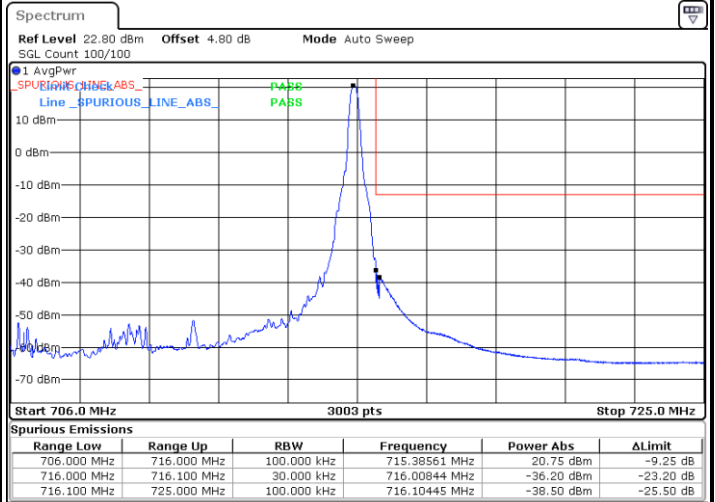
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



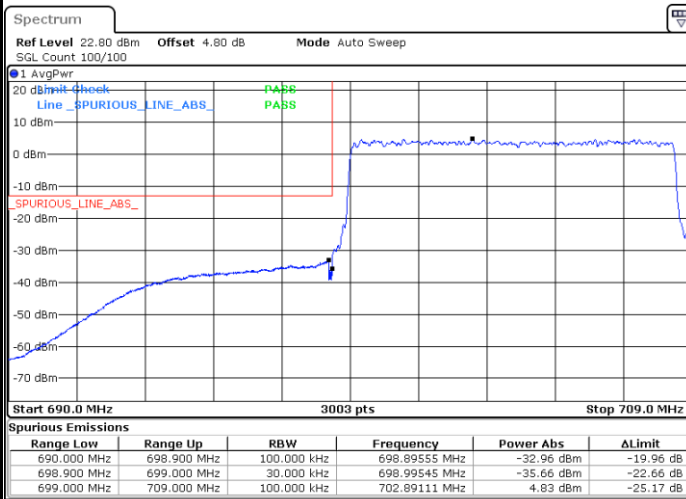
Date: 4.MAR.2022 22:38:16

Highest Band Edge / 1 RB



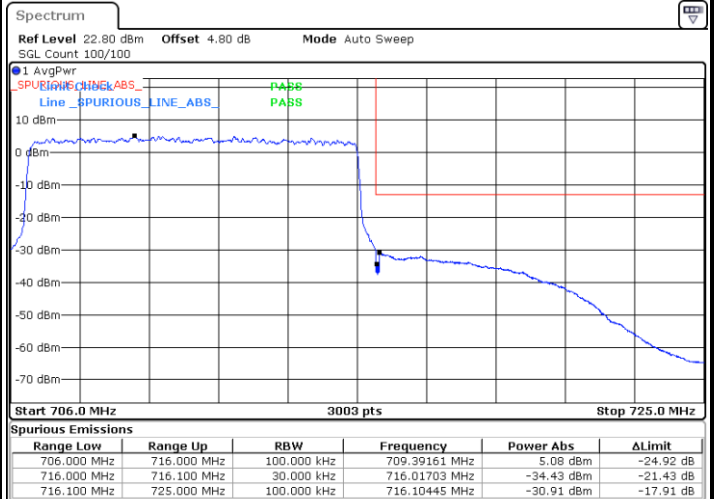
Date: 4.MAR.2022 22:50:35

Lowest Band Edge / Full RB



Date: 4.MAR.2022 22:39:17

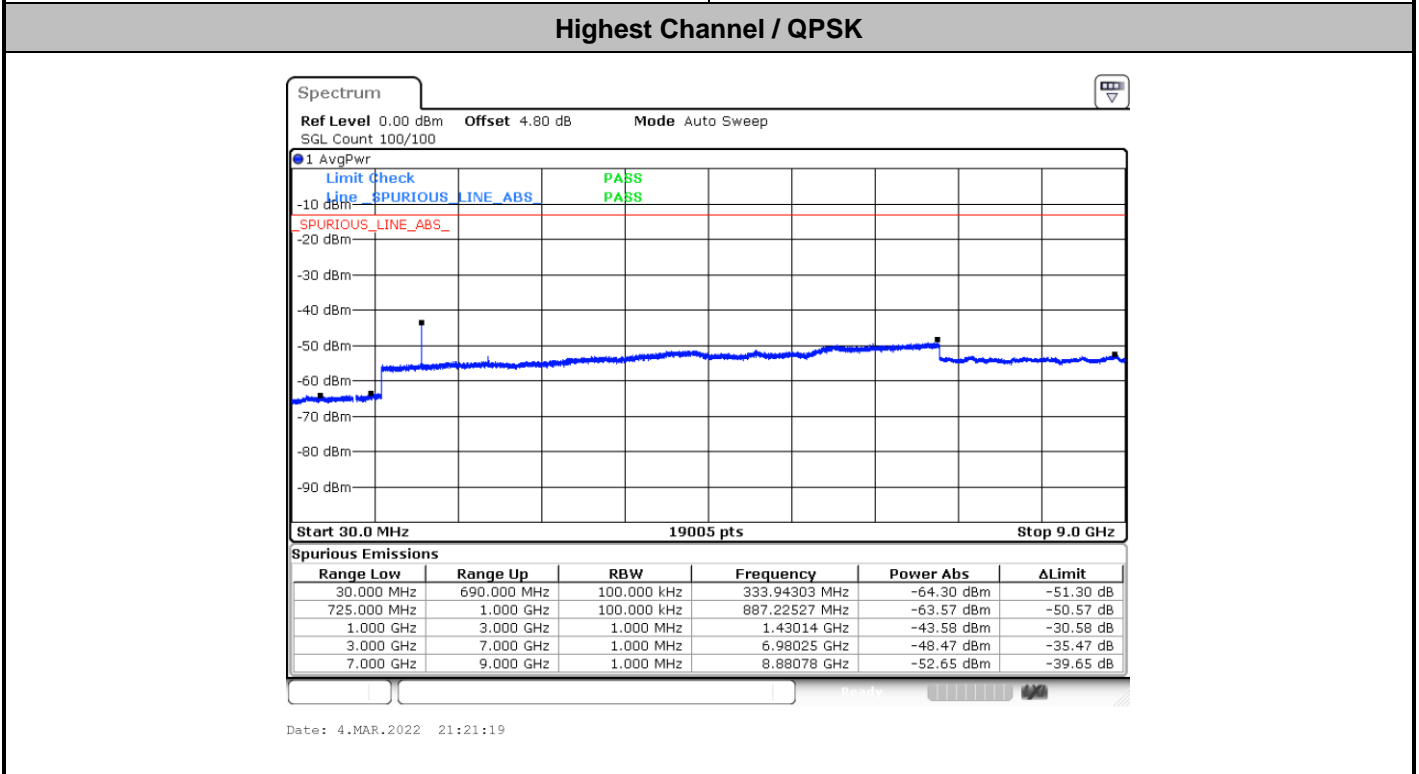
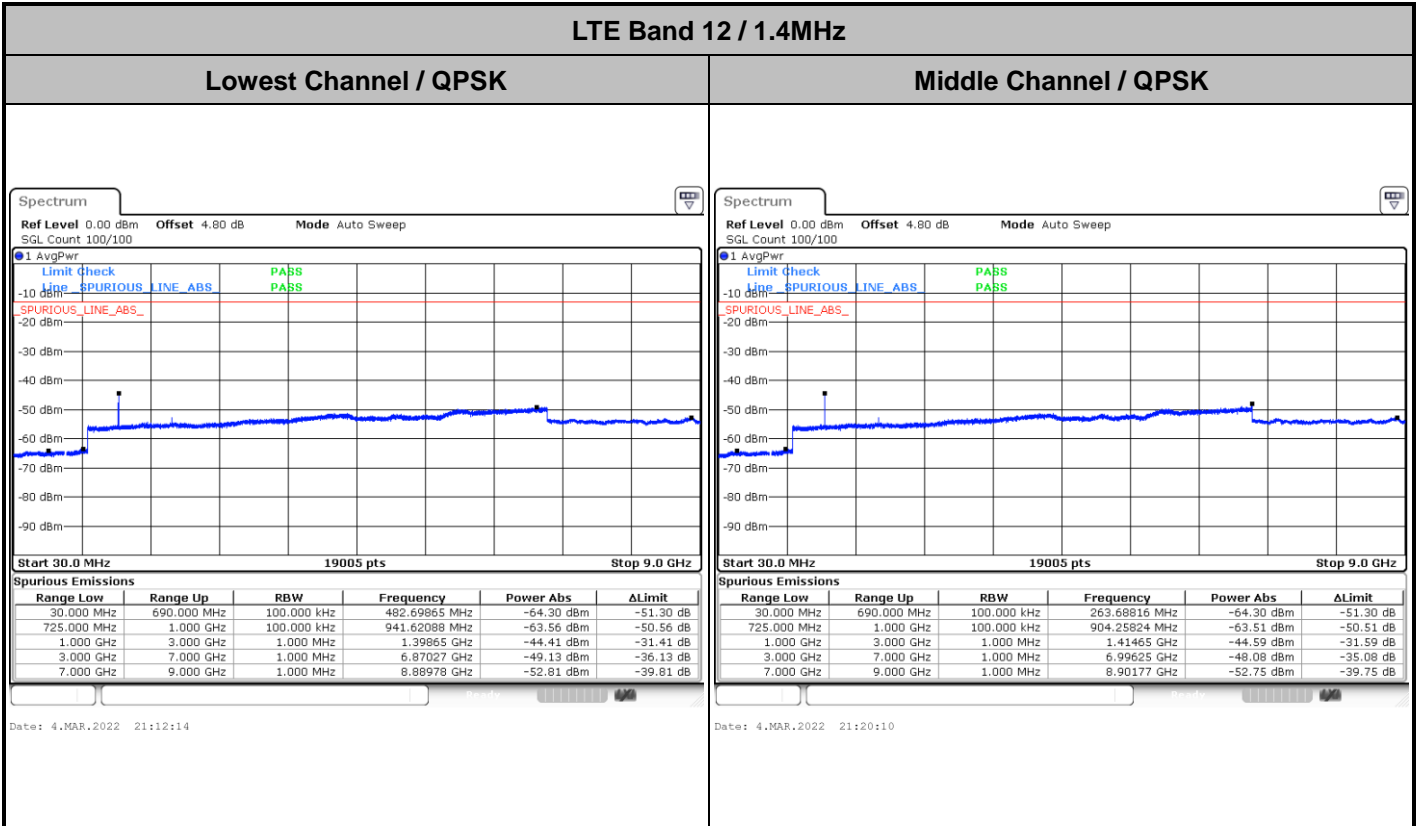
Highest Band Edge / Full RB



Date: 4.MAR.2022 22:51:45



Conducted Spurious Emission

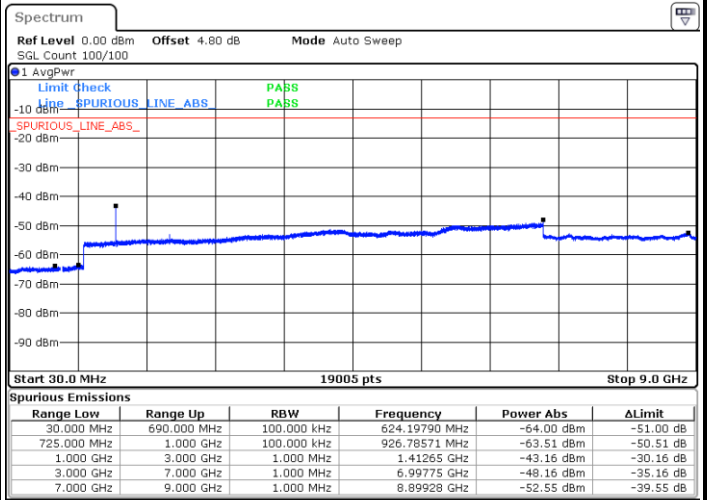
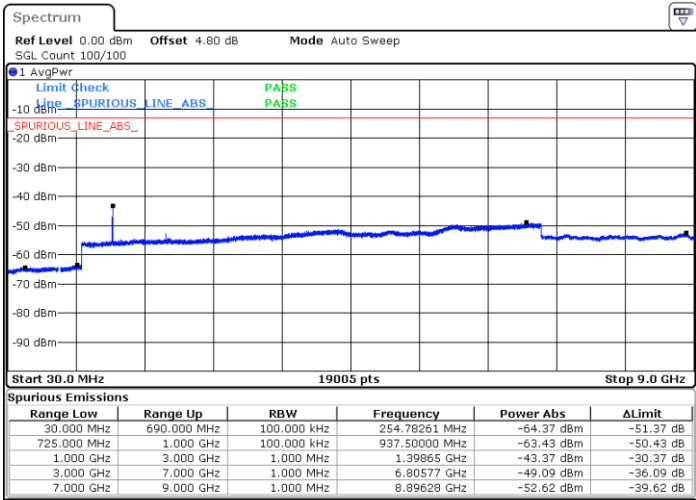




LTE Band 12 / 3MHz

Lowest Channel / QPSK

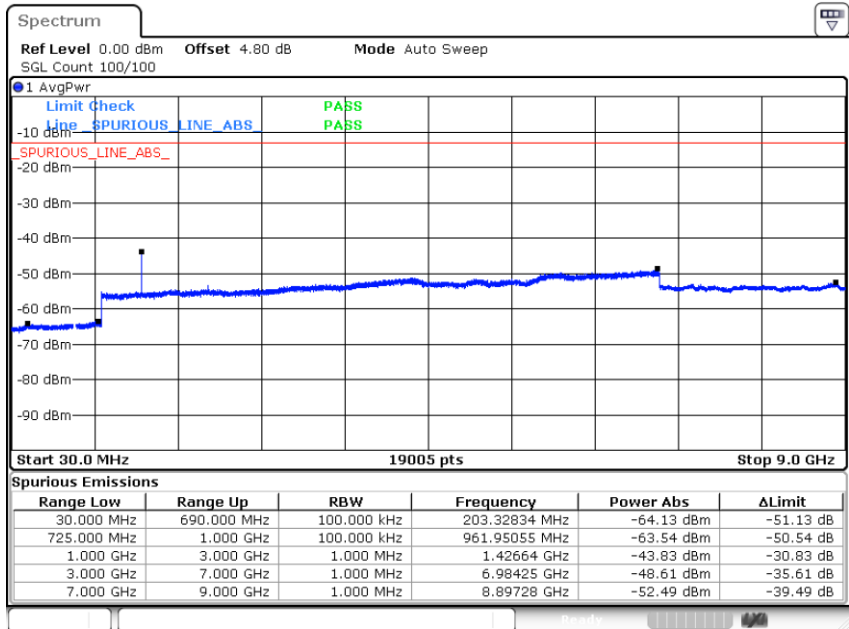
Middle Channel / QPSK



Date: 4.MAR.2022 21:46:41

Date: 4.MAR.2022 21:53:59

Highest Channel / QPSK



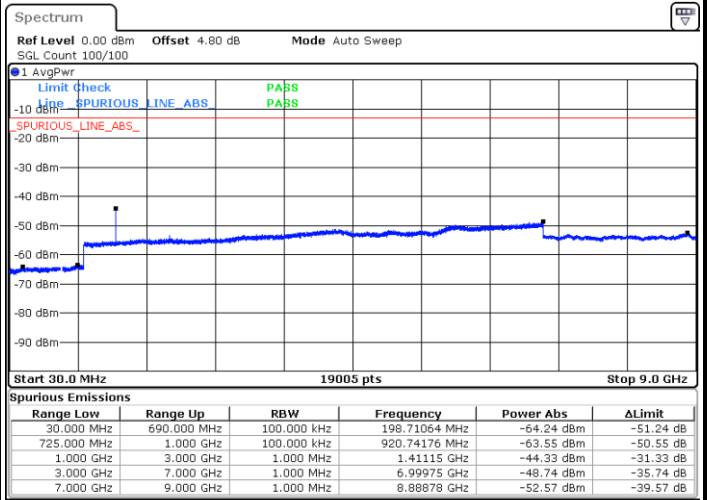
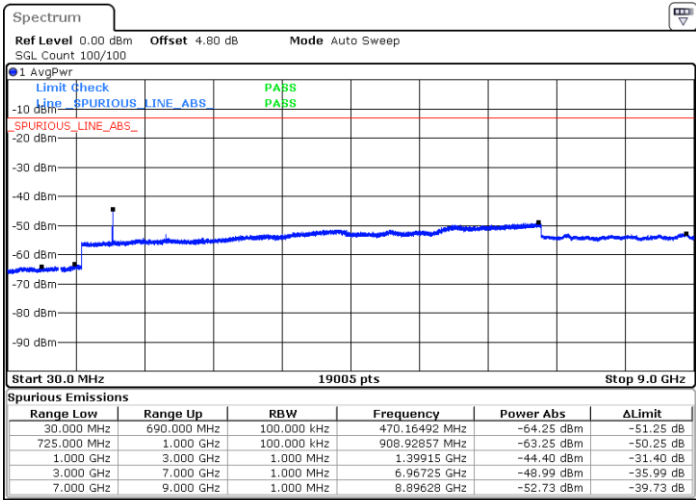
Date: 4.MAR.2022 21:54:57



LTE Band 12 / 5MHz

Lowest Channel / QPSK

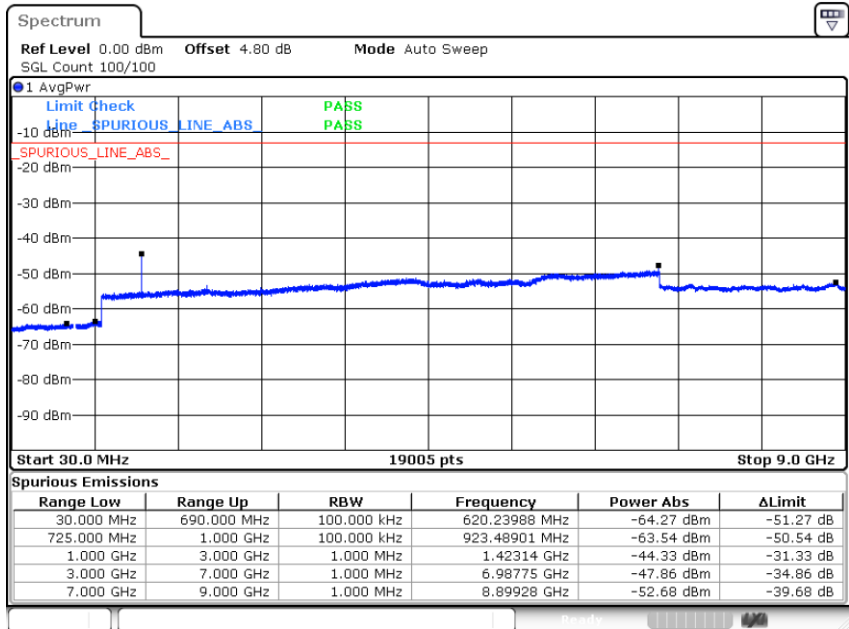
Middle Channel / QPSK



Date: 4.MAR.2022 22:03:59

Date: 4.MAR.2022 22:14:49

Highest Channel / QPSK



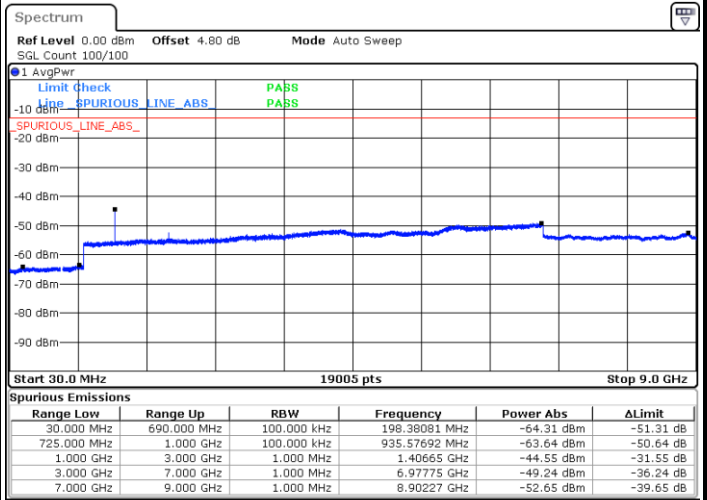
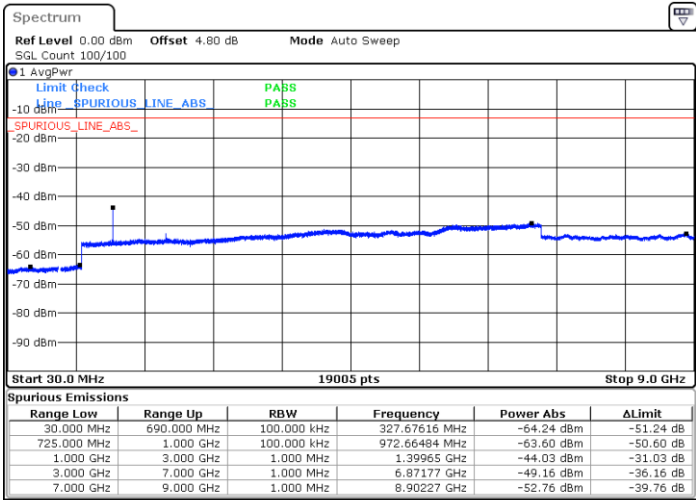
Date: 4.MAR.2022 22:15:52



LTE Band 12 / 10MHz

Lowest Channel / QPSK

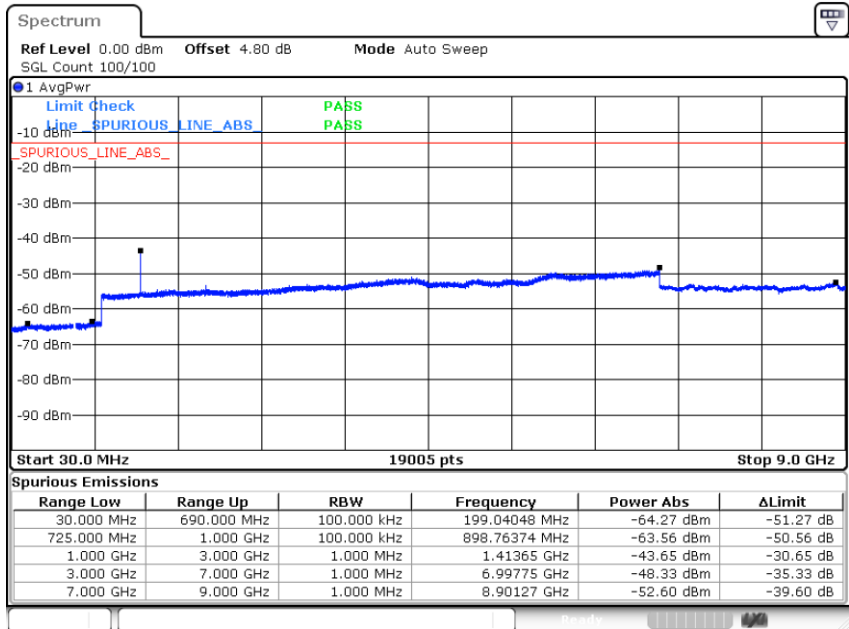
Middle Channel / QPSK



Date: 4.MAR.2022 22:28:43

Date: 4.MAR.2022 22:41:59

Highest Channel / QPSK



Date: 4.MAR.2022 22:48:01



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Within Band
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0007	

Note:

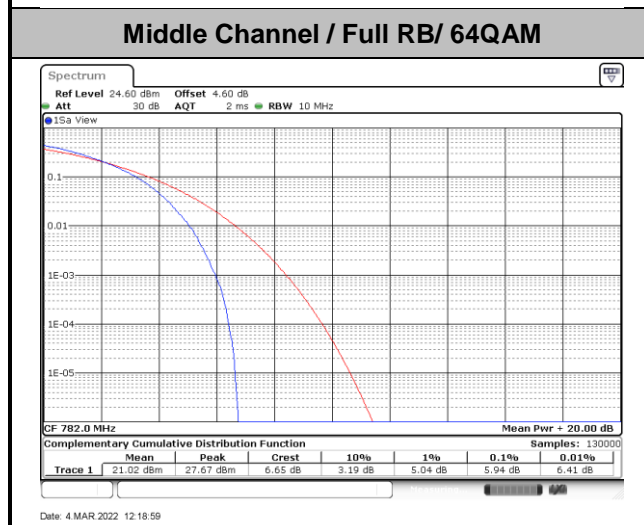
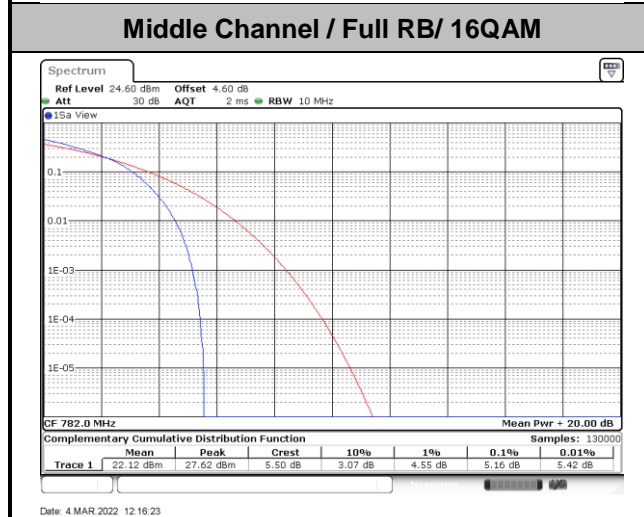
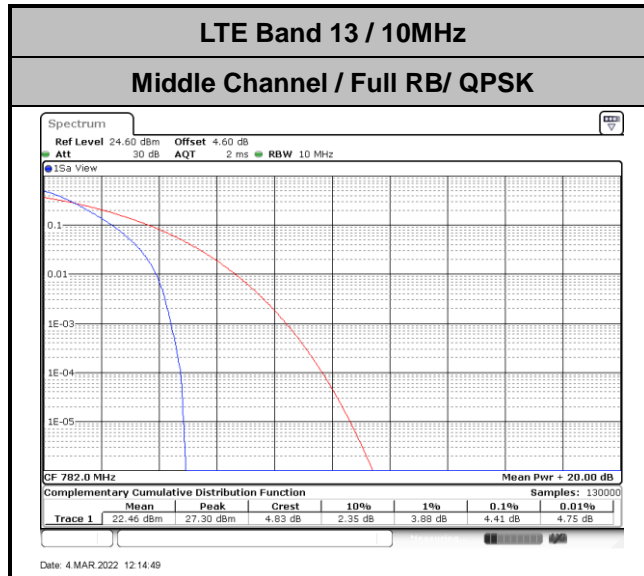
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

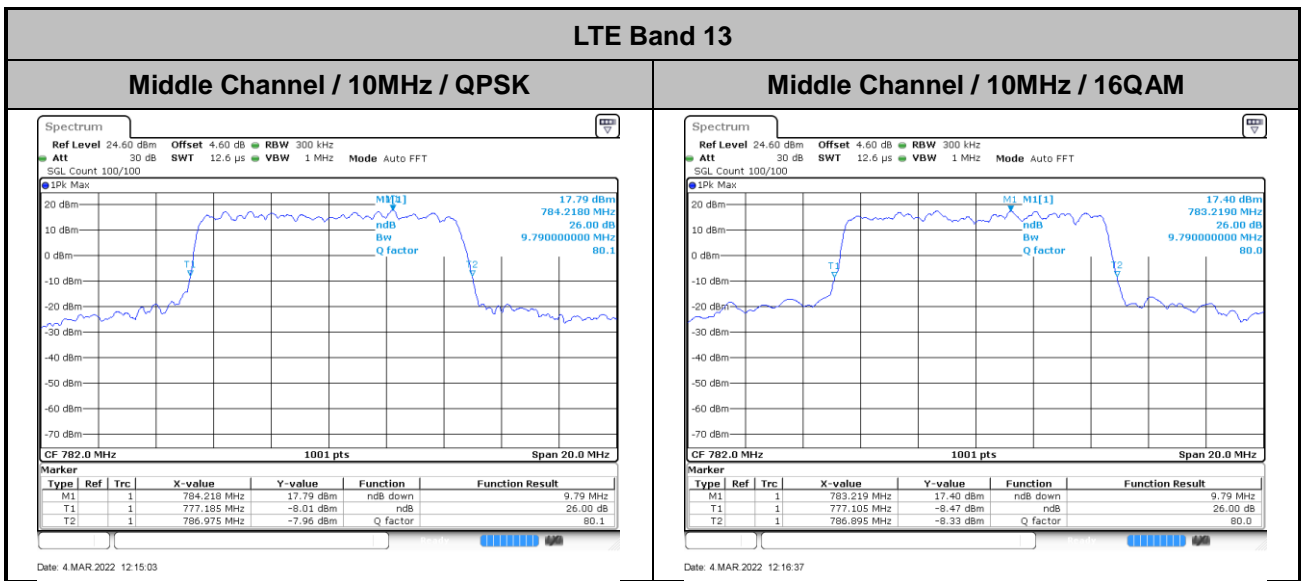
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	-	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	-	Result
Middle CH	4.41	5.16	5.94	-	PASS





26dB Bandwidth

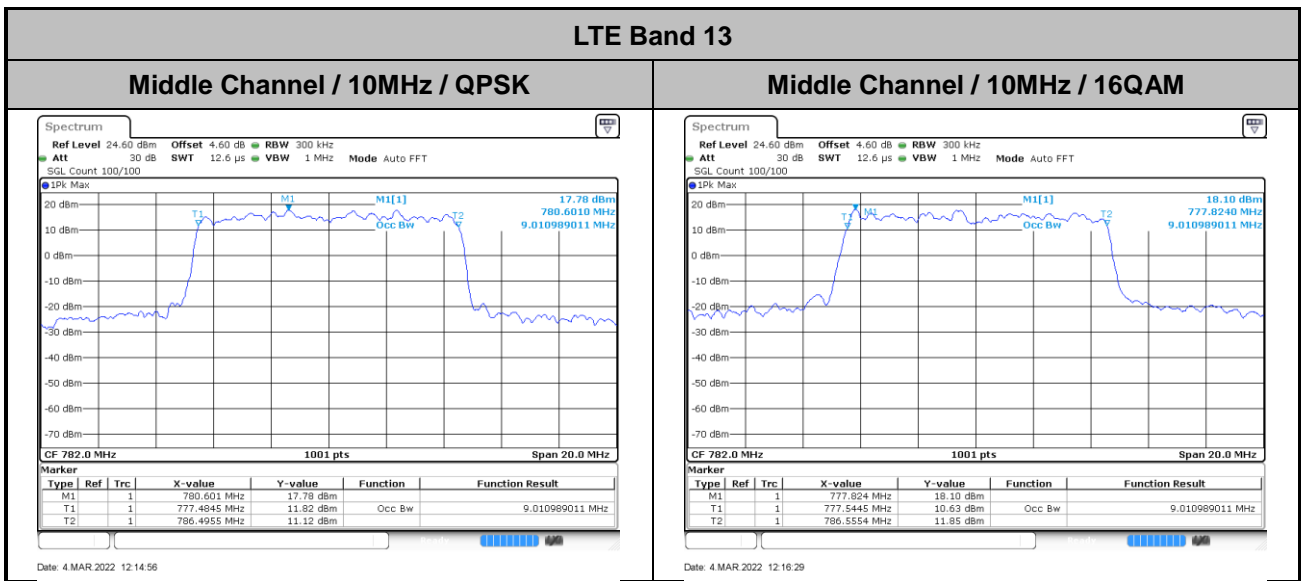
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.79	9.79





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01

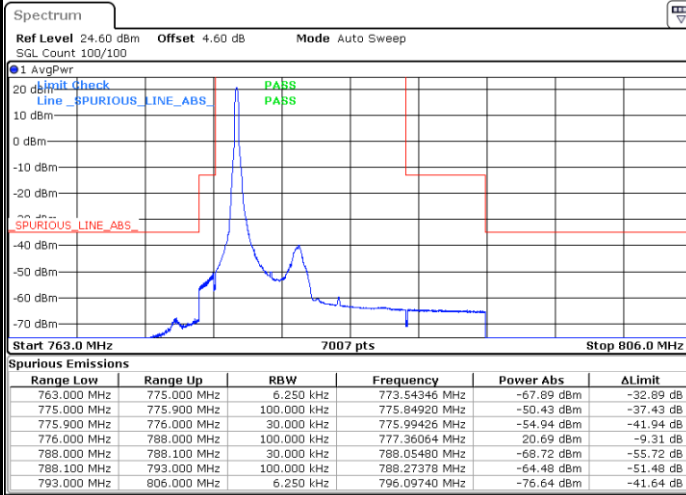




Conducted Band Edge

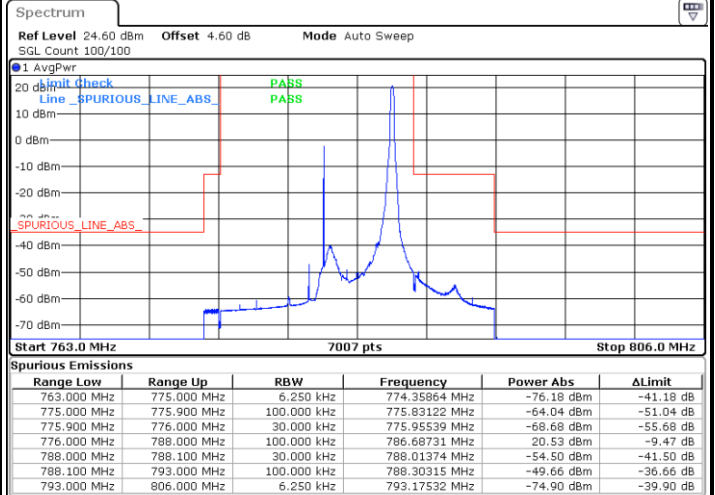
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



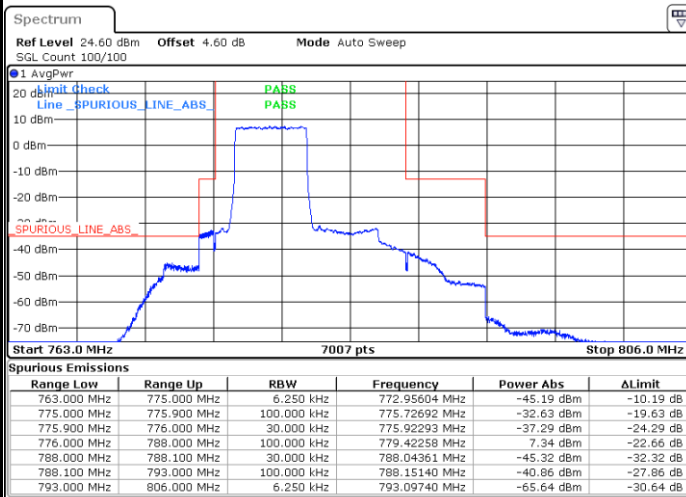
Date: 4 MAR 2022 11:38:27

Highest Band Edge / 1 RB



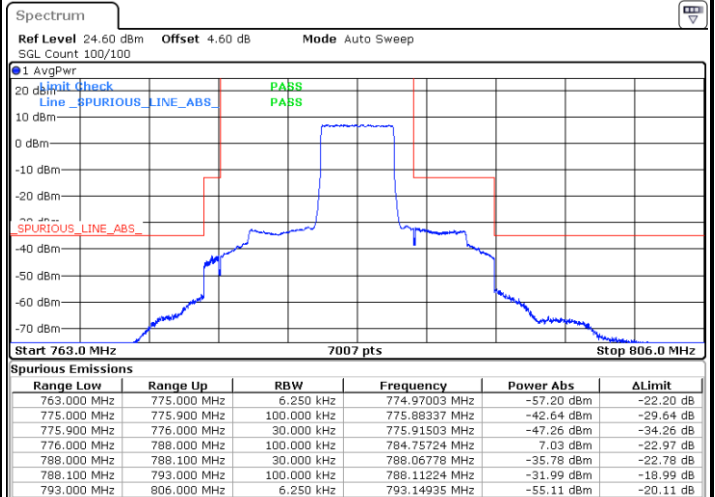
Date: 4 MAR 2022 12:03:37

Lowest Band Edge / Full RB



Date: 4 MAR 2022 11:55:54

Highest Band Edge / Full RB



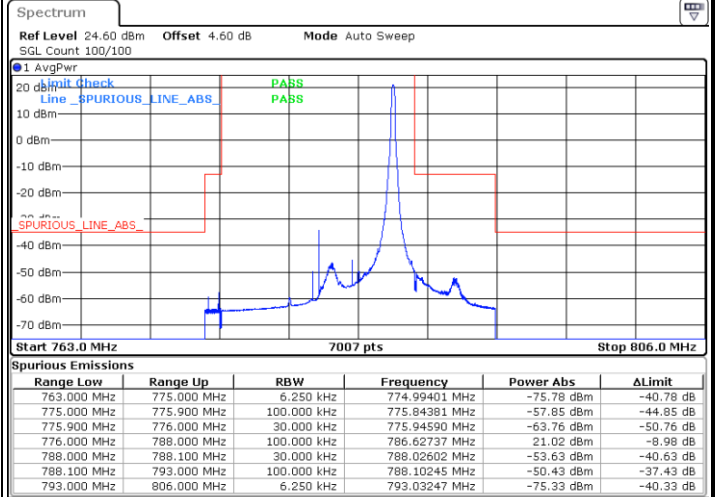
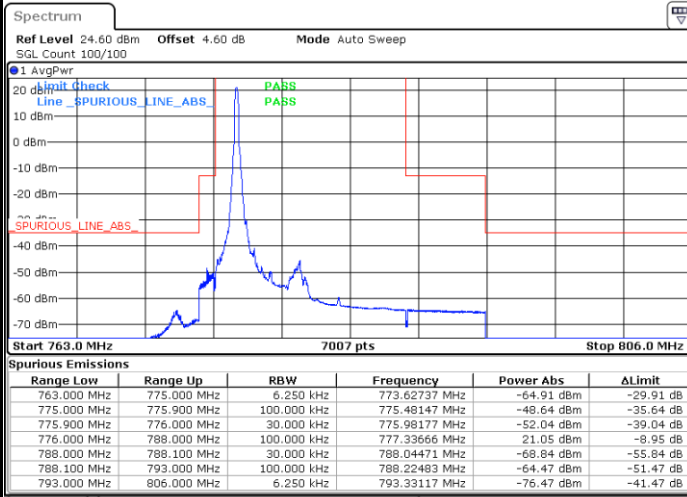
Date: 4 MAR 2022 11:57:30



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

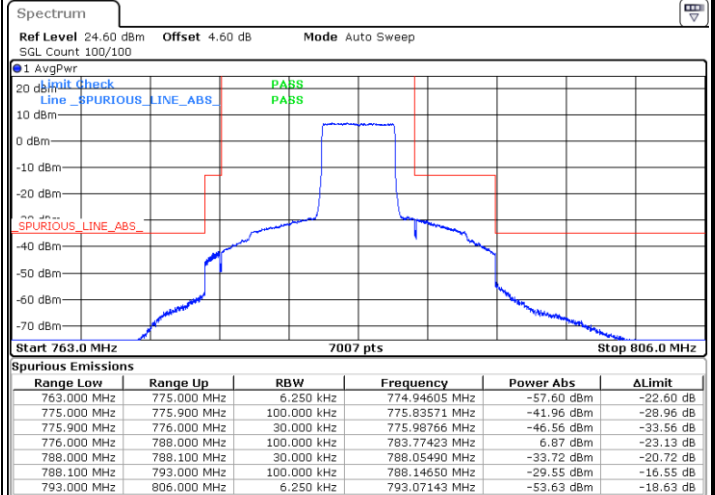
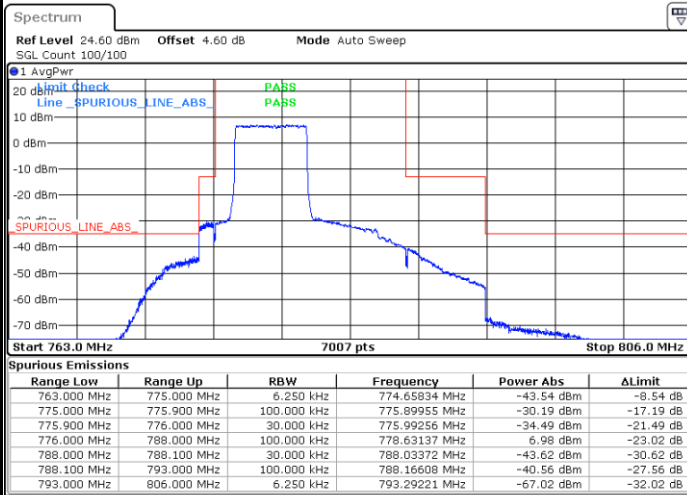


Date: 4 MAR 2022 11:46:47

Date: 4 MAR 2022 12:02:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4 MAR 2022 11:54:48

Date: 4 MAR 2022 11:58:37